TGA Convention Report — Page 41

Volume 169 No. 21

Oil, Paint and Drug Reporter

The Chemical Market Authority Since 1871

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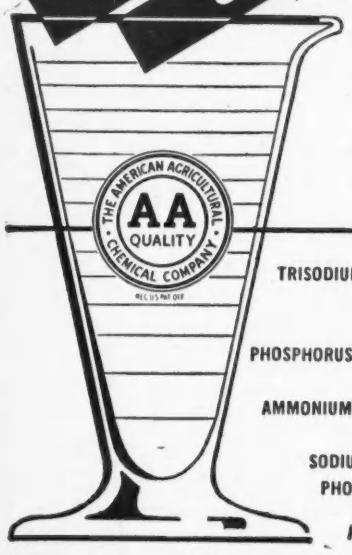

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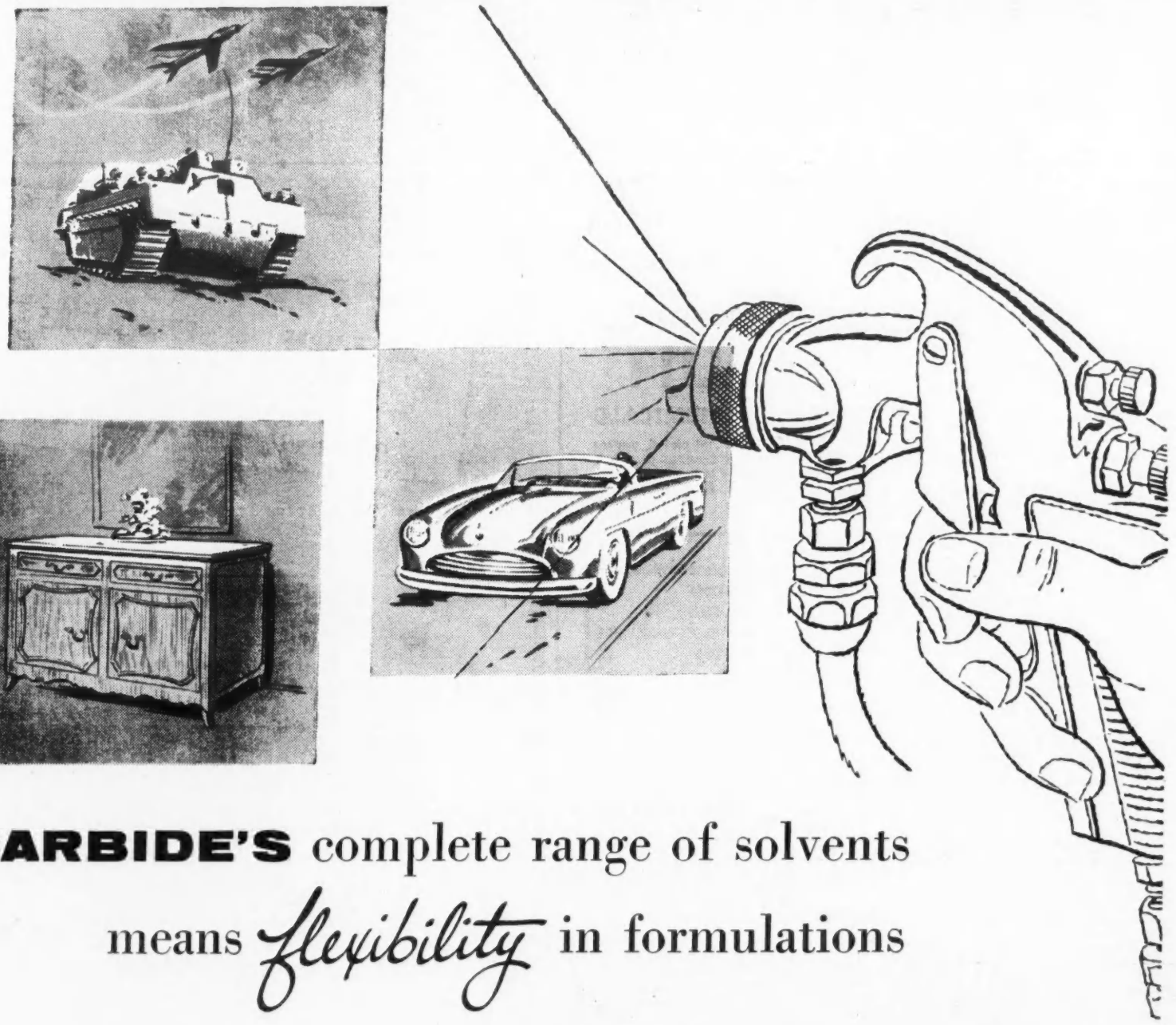

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Army Releases Modified

The Department of the Army has modified its regulations relating to the discharge of personnel on the basis of importance to national health, safety, or interest. Reservists who have been called into service from private industry as well as new enlistees are affected by the regulation.

As a general policy favorable action is to be given to requests for release from active military status in situations wherein a critical need for the services of an individual in a civilian capacity from the viewpoint of health, safety, or general welfare outweighs the need of the nation for the individual in active military service.

Release from service will be favorably considered when:—

The application is motivated by critical national or community interest and not by the personal desire or interest of the applicant.

There has been a significant change in the individual's particular field of endeavor that would warrant deferment from active military service on the basis of criticality to national health, safety, or interest if he were currently subject to consideration for induction under policies and procedures applicable at the time of the applicant's entry on active duty.

In applying for release, the applicant must state the name of the firm or agency with which he will be connected, product manufactured or service rendered, title and description of position to be filled, applicant's connection with the activity prior to military service, the applicant's qualifications for the position, and submit a letter or affidavit from responsible officials of the firm or agency substantiating the facts given and setting forth the need for the services of the applicant.

Chemical Industry Urged To Focus Its Research Work On Fuels, Lubes, Plastics

E. I. duPont de Nemours & Co. is looking for some new chemical worlds to conquer. The big, diversified company from Wilmington, Del., wants to know just where in American industry there are new opportunities for the researcher, the chemist, and the producer. To find the answers the staff of *DuPont Magazine* queried twenty companies in seven different fields served by chemistry. What they came up with, the current issue of the magazine says, is "guaranteed to keep laboratory lights burning for years to come."

The major needs, it is reported, are less-corrosive ferrous metals, better fuels and lubricants and new plastics. The survey also notes the need for developments in air conditioning and aromatic chemicals.

Need for Non-Rusting Metals

A spokesman for General Motors Corporation, speaking of the need for non-rusting metals, said, "The constant struggle to prevent nature from converting the products of industry back to iron oxide is one of our most important problems."

T. F. Olt, Armco's director of research, spoke of the steel industry's problems in raw materials as a major challenge to chemistry. These include the concentration and upgrading of low-grade iron-bearing minerals; development of a simple process for altering non-magnetic materials to permit their separation magnetically, and a way of recovering scarce manganese from low-grade ores and industrial slag.

Research directors for Jones & Laughlin Steel Company and Swift & Co. mentioned a two-purpose processing line that would prevent rust and also replace tin as a coating for the thin iron plate used to make food containers.

In the plastics field, one spokesman named the need for a "truly waterproof foam plastic for floats" and a "durable,

—Continued on page 67

CHEMSTRAND PRESIDENT: Edward A. O'Neal, jr., former vice-president of international operations and director of Monsanto Chemical Company, St. Louis, Mo., who has been elected president of Chemstrand Corporation, Decatur, Ala., to succeed Henry H. Bitler who is returning to American Viscose Corporation.

Fertilizer in Farm Economy Detailed by Dep't of Agriculture

Increased use of fertilizers would enable farmers to lower total costs of production while increasing total farm income, the Department of Agriculture reported last week in a study of the farm cost situation. The department did not flatly recommend that growers expand their fertilizer consumption in view of the current surplus problem; in fact, it cautioned that the higher yields from advancing technology would probably lead to lower prices.

But it did lend strong support to the arguments of the fertilizer industry that the way to maintain farm income in the face of declining prices is by proper use of fertilizers and other modern technics that increase output while reducing unit costs of production.

Change in Costs

The importance of fertilizers in farm production was pointed up by the department in a comparison of changes in various cost factors since 1940. While farm wage rates increased 300 percent and real estate increased 150 percent, prices paid for fertilizer increased only 55 percent.

The index of prices paid by farmers for fertilizer declined 2 percent in the year ended April 15 and is now about 3 percent below the 1953 peak, 5 percent above the 1947-49 level, and 48 percent above the 1935-39 level.

The fact that fertilizer prices have advanced more slowly than other cost rates in the last twenty years, the report said, is especially true of the newer nitrogen fer-

—Continued on page 82

TGA's NEW PRESIDENT: Pierre Harang, vice-president and director of Houbigant Sales Corporation, New York, elected president of the Toilet Goods Association for 1956-57. (Special report on TGA convention appears on page 41.)

House Unit Keeps Hands Off Patman Bill

The antitrust subcommittee of the house judiciary committee last week refused to take a stand on the Patman bill (HR 11), repealing the "good faith" defense clause of the Robinson-Patman act, and sent the legislation on to the full committee without recommendations.

Refusal of the subcommittee to either

—Continued on page 67

Alcohol-Butadiene Plant Is Sold to Union Carbide

The government sold its alcohol-butadiene plant at Louisville, Ky., last week to Union Carbide & Carbon Corporation, New York, for $3,125,000.

The Rubber Producing Facilities Disposal Commission said that it had signed a sales contract with the firm subject to an existing lease between the commission and Publicker Industries, Inc., Philadelphia, which expires in April, 1958.

The sale is subject to clearance by the Attorney General on antitrust matters, and to a review by congress after the commission makes its formal report. The Louisville plant was the last of the government's twenty-seven rubber production facilities unsold.

Pennsalt Is Expanding Its Interests in Mexico

Pennsylvania Salt Manufacturing Company, Philadelphia, is expanding its operations in the Republic of Mexico. Nearing completion at Navojoa, Sonora, in the northwestern area is a new agricultural chemical processing plant and distribution center.

This plant provides an expansion of Pennsalt de Mexico's central plant and office facilities in Mexico City and establishes another base for the eventual distribution of the company's full line of chemicals.

Late this month, Minerales y Metales Industriales, another subsidiary in Mexico, will complete its first year of fluorspar mining activities in the San Luis Potosi area. The mine produces metallurgical grade ore used as a flux in making open heartn steel.

Alcoa to Spend $600 Million

Aluminum Company of America, New York, plans to spend $600 million on expansion and improvement during the next five years. Alcoa is already spending $8.5 million this year on research and development.

Zirconium Capacity To Be Lifted by USI

U. S. Industrial Chemicals Company, New York, a division of National Distillers Products Corporation, which recently announced its plans for the construction of a million and a half pound-per-year reactor-grade zirconium sponge plant (OPD, 5/7/56), will also complete a separate half million pound-per-year semi-commercial metals plant within the next three to four mon hs.

This was revealed by Dr. Robert E. Hulse, vice-president in charge of chemical activities for National Distillers, who pointed out that the smaller plant, located near the larger one in Ashtabula, Ohio, will be used for production of zirconium sponge during construction of the major plant. The unit will include chlorination equipment, but no zirconium-hafnium separation facilities.

The semi-commercial plant has been designed for easy conversion to production of titanium or hafnium sponge. Other similar metals such as thorium or beryllium

—Continued on page 67

Cyanamid Herbicide Unit Is Under Way in Canada

North American Cyanamid Company, Ltd., Canada, has begun construction of extensive facilities for the production of amino triazole, a new herbicidal and defoliant chemical. The Canadian firm is a subsidiary of the American Cyanamid Company, New York.

The facilities will be located at Cyanamid's Welland plant, Stamford Township, Niagara Falls, Ontario, where ammonium nitrate and nitrogen solution fertilizers are manufactured for the company's agricultural chemicals division. It is expected that the facilities will triple production capacity for amino triazole by 1957.

Natural Gas: Key Factor in Italian Chemical Growth

The discovery of natural gas in Italy is probably playing as important a role as anything else in the booming chemical industry in that country, the United States government believes.

The Business and Defense Services Administration, in its latest chemical and rubber industry report, points out that production of the fuel has increased sevenfold since 1950. Thus, the lack of domestic fuel resources, which had long been a barrier to the country's industrial progress, is rapidly being overcome.

The chemical industry has been in the vanguard of Italy's postwar recovery. Its remarkable expansion is shown by the July, 1955, production index, which reached 331 (1938=100), a postwar record, BDSA points out.

Leading manufacturers are in northern Italy, whereas the principal domestic raw materials, including pyrites, sulfur, and rock salt, come from the south.

Trade sources estimate that 40 percent of total Italian chemical production is in the Milan district. However, considerable emphasis is now being placed on further development of the industry in southern Italy. Included in these plans are the establishment of two new fertilizer works and a pharmaceutical plant.

The principal chemical firms in the Milan area are the Montecatini group, with several of its associated companies; Industrie Chimiche Saronio, Legnano (Milan Province); A. E. Bianchi, Rho (Milan Province); and Sicedison, Milan.

The Montecatini group dominates the entire Italian chemical industry and provides employment for about 60,000 workers. Its paid-up capital is 84 billion lire and proceeds from sales amounted to 126.2 billion lire in 1954. With its related companies, the combine owns 125 plants, eighteen mines and refineries, and eight power plants.

Montecatini is reported to have about 37 billion lire invested in other companies, including ACNA, Cokapuania, Cokitalia,

—Continued on page 37

GSA Directed to Purchase Domestic Materials for Stockpile

General Services Administration is to do more purchasing of strategic materials for the national stockpile from domestic sources. A directive to the agency from the Office of Defense Mobilization over last weekend emphasized that the purchases should be made, wherever possible, from domestic sources in order to maintain the mobilization base of strategic materials in this country.

RESEARCH MANAGER: Dr. Alfred S. Cummin, appointed manager of industrial products research at the new research center of Spencer Kellogg & Sons, Inc., in Buffalo, N. Y.

As a first step in putting the new policy in effect, ODM also ordered GSA to suspend further procurement of foreign fluorspar and antimony until the agency had determined the possibility of acquiring additional quantities domestically. Domestic fluorspar interests have been strongly objecting to flourspar imports of the acid grade and now have a petition pending with ODM for a hearing to show how such imports may be threatening national security.

What Directive Authorizes

The new ODM directive authorizes market purchases for the national stockpile of the following materials which, if they cannot be purchased from domestic sources, may be acquired from foreign sources by barter:—

To meet minimum stockpile objectives —antimony; asbestos, amosite; chromite, metallurgical; fluorspar, metallurgical; iodine; magnesium; manganese, battery type, synthetic dioxide; manganese, chemical, types A and B; mica, muscovite block; mica, muscovite film; mica, phlogopite splittings; opium; selenium; shellac; silicon carbide; talc, steatite block.

To meet long term stockpile objectives —lead; zinc.

The directive authorized the transfer to the strategic and critical stockpile of the following material purchased with defense production act funds:—

To meet minimum stockpile objectives —bauxite, Jamaica; beryl ore; cobalt; mica, muscovite block; nickel.

To meet long term stockpile objectives —columbite; manganese, metallurgical; tin; zinc.

The directive also recommended the following materials for procurement by

—Continued on page 63

Motor Fuel Use At Peak Last Year

Consumption of motor fuel rose to 54 billion 333 million gallons in 1955, soaring to an all-time high, and representing an increase of 3 billion gallons over 1954. This annual summary, prepared by the American Petroleum Institute, shows that nineteen states are consuming a billion or more gallons per year.

Newest addition to this billion-plus category is Kansas, joining the ranks of California, Florida, Georgia, Illinois, Indiana, Iowa, Massachusetts, Michigan, Minnesota, Missouri, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Texas, Virginia, and Wisconsin.

Tennessee and Oklahoma are approaching the billion-gallon mark, but didn't quite make it in 1955, the report shows.

California continues to lead the parade as the biggest consumer of motor fuel, by far. In 1955 statistics show that Californians required 5 billion 615 million gallons in 1955, up almost 360 million gallons over 1954.

Others in the first five, and their 1955 consumption totals were:—Texas, 4 billion 438 million gallons; New York, 3 billion 515 million gallons; Ohio, 2 billion 913 million gallons; Pennsylvania, 2 billion 846 million gallons.

Strategic Metals Purchases Data Are Announced by FDA

General Services Administration last week announced purchases of the following quantities of domestic tungsten, manganese, chrome, mica, beryl, asbestos and mercury through March 31, under a program to stimulate production of these minerals in this country:—

Tungsten, 2,652,328 short ton units, delivered against a goal of 3 million short ton units; manganese, 8,359,740 units delivered against an authorized total of 31 million units; chrome, 105,652 long tons delivered against a goal of 200,000 long tons.

Also, mica 7,965 tons delivered against an authorized goal of 25,000 short tons; beryl, 914 short tons delivered against a goal of 1,500 short tons; mercury, five flasks delivered against an authorized 200,000 flasks from both domestic and Mexican sources.

The Week's Price Changes

Defluorinated Phosphate, Platinum, Carnauba Wax Are Higher. Lard, Argentine Casein, Brazilian Bois de Rose Oil Lower.

Prices Advanced

Acid, caprie, 1c. per lb. (p. 80)
Caprylic, 1c. per lb
Laurie, 1c. per lb.
Defluorinated phosphate, feed grade, 14½% P, $2 per ton (p. 39)
17%, $2 per ton
Fishmeal, $2 per ton (p. 39)
Fishscrap, $2 per ton (p. 39)
Linseed meal, 50c. to $1 per ton (p. 80)
Oil, castor, Braz., ¼c. per lb. (p. 80)
Fish, refd., ½c. per lb.
Rapeseed, ¼c. per lb.
Tung, ½c. to ¾c. per lb.
Pimento, Jamaica, 11c. per lb. (p. 59)
Mexican, 1c. per lb.
Platinum, $5 per oz. (p. 36)
Potato starch, Maine, ¼c. to ½c. per lb. (p. 61)
Soybean meal, $2 per ton (p. 80)
Wax, candelilla, crude, 3c. per lb. (p. 80)
refd., 3c. per lb.
Carnauba, crude, 7c. per lb.
refd., 7c. per lb.

Prices Reduced

Anise seed, Spanish, 1c. per lb. (p. 59)
Syrian, 1c. per lb.
Casein, imp., Arg., ½c. per lb. (p. 76)
Clove, Madagascar, 1c. per lb. (p. 59)
Cocoa butter, 1c. per lb. (p. 80)
Coriander seed, Moroccan, ¼c. per lb. (p. 59)
Lard, cash, 1/10c. per lb. (p. 80)
Mace, West Indian, 15c. per lb. (p. 59)
Nutmeg, East Indian, 2c. per lb. (p. 59)
West Indian, 3c. per lb.
Oil, bois de rose, Brazil, 15c. per lb. (p. 59)
Cottonseed, crude, ⅛c. to ¼c. per lb. (p. 80)
refd., ¼c. per lb.
Peanut, crude, ¾c. per lb. (p. 80)
refd., ⅝c. per lb.
Soybean, crude, ¼c. per lb. (p. 80)
refd., ¼c. per lb.
Sage, 25c. per lb. (p. 59)
Paprika, Roumanian, 2c. per lb. (p. 59)
Spanish, 1c. per lb.
Yugoslavian, 4c. per lb.
Pepper, white, 4c. per lb. (p. 59)
Poppy, Argentine, ½c. per lb. (p. 59)

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER'S relative record of prices of chemicals and related materials is currently as follows:—

(100=1949 average)

May 18, 1956	May 11, 1956	May 20, 1955
109.08	109.12	106.73

Catalin Head Okays Reichhold

The proposed merger of Catalin Corporation, New York, and Reichhold Chemicals, Inc., White Plains, N. Y., is reported to be a step nearer now that Harry Krehbiel, president of Catalin, has completed a nation-wide tour of Reichhold's major plants and reported favorably to his stockholders. The directors of the two companies have agreed on merger terms, but stockholders of neither have voted on the move as yet.

Mr. Krehbiel said his trip confirmed his belief that Reichhold's thirteen domestic plants are modern, efficient, and exceptionally well located. He also was impressed with the caliber of the company's operating personnel, he said.

Describes Washington Facilities

Production of soybean glue already has begun at the new RCI plant at Tacoma, Wash., and a 20,000-square-foot warehouse there is complete, Mr. Krehbiel told his directors. He described a new office building, facilities for the production of pentachlorophenol, and other structures on the forty-five acre site as "almost finished."

Other Reichhold pentachlorophenol,

—Continued on page 38

RESEARCH DIRECTOR: Brig. Gen. John R. Wood, named vice-president and director of research for Burroughs Wellcome & Co. (U.S.A.), Inc., Tuckahoe, N. Y., to become effective August 1 upon his retirement from the Army Medical Corps.

Electro Metallurgical Forms Marketing Research Unit

Electro Metallurgical Company, New York, a division of Union Carbide & Carbon Corporation, has announced the formation of a new unit, the marketing research division within the sales department. The division will be responsible for all phases of market research and for the development of secondary markets for the company's products.

The division will be headed by S. M. Norwood, vice-president, who will continue to maintain high-level contacts with management, metallurgical, and operating personnel in the iron, steel, titanium, and other nonferrous metal industries.

Nat'l Starch Elects V.P.'s

The election of Robert A. Bintz and Lester Klempner as assistant vice-presidents has been announced by National Starch Products Inc., New York.

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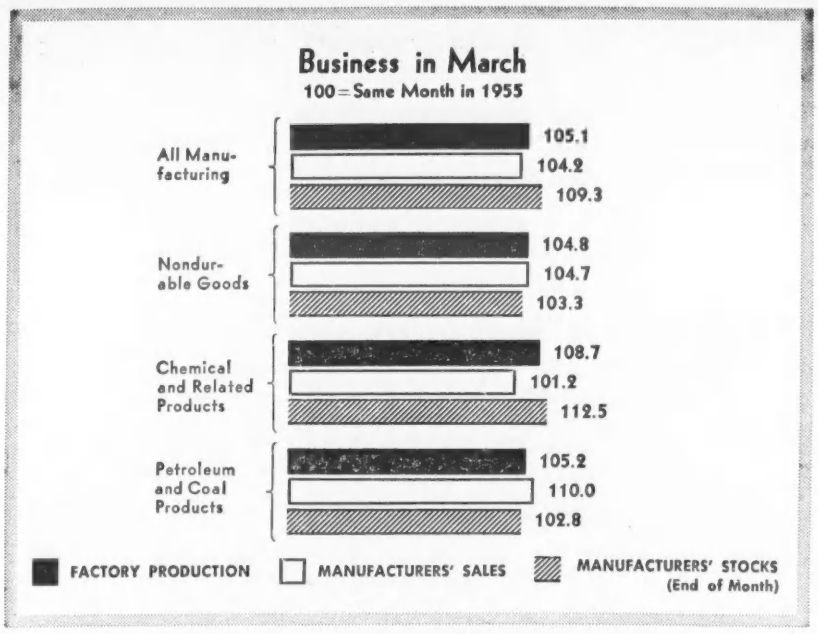

Bug, Fungus and Weed Killers Seen Amply Available This Year

The Department of Agriculture reports that supplies of insecticides, fungicides, and weed killers will be ample in 1956, as in the past year or two, for most needs of domestic agriculture. Users of these pesticides can avoid temporary or local shortages, it was added, by placing orders as early as possible. In its annual review of the pesticide situation for the year, prepared by Harold H. Shepard, of the Commodity Stabilization Service, the department said the industry reports that its business was better in 1955 than in any year since 1951.

Conditions over extensive areas favored the development of heavy infestations of the boll weevil on cotton, and rains made necessary many applications of cotton insecticide, it was stated.

Grasshoppers a Problem

In the midwest, infestations of grasshoppers and the European corn borer were serious. Extensive forested areas of the western United States were aerially sprayed in 1955 to control insect pests of timber, primarily spruce budworm.

Possibilities of the Miller amendment affecting the pattern of fertilizer distribution was speculated upon by Mr. Shepard. He said that the Miller amendment pertaining to the establishment of pesticide residue tolerances on raw agricultural commodities, is likely to promote the use of materials such as pyrethrum and rotenone which need no tolerance on food

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PRODUCTION MANAGER: Louis F. Mullick, former vice-president in charge of plant and production for Walker Laboratories, Mt. Vernon, N.Y., who has been made production manager for Strong, Cobb & Co., Cleveland, Ohio.

Vinyl Chloride Unit Slated by Ethyl Corp.

Ethyl Corporation, New York, has plans under way to enter the vinyl chloride monomer field. The company will build a plant valued at several million dollars at its manufacturing center in Baton Rouge, La., with completion scheduled for the latter part of next year.

The product, made from ethylene, will be sold to the plastics industry for the manufacture of polyvinyl chloride. Polyvinyl chloride in turn is one of the major plastics in use today, the company points out, and finds widespread use in upholstery materials, electric wire and cable,

—Continued on page 87

Battery Additive Dispute Settled; Maker Absolved

The controversial false advertising case relating to battery additive AD-X42 came to a conclusion last week. In a 4-0 decision the Federal Trade Commission absolved Pioneers, Inc., Oakland, Calif., and its president, Jess M. Ritchie, of making unwarranted claims for the product to preserve and restore new life to lead-acid storage batteries.

After two years of investigations and hearings, the commission agreed with the

—Continued on page 87

Fertilizer Facility in Africa Slates $8 Million Expansion

The sole fertilizer company in the Federation of Rhodesia and Nyasaland has announced an $8 million expansion program for its Salisbury plant, according to the Canadian Department of Trade and Commerce.

After its expected completion in 1958, the plant will make the federation independent of imported fertilizers.

High Court Refuses Review Of California Air Pollution Law; No Federal Question Involved

The Supreme Court of the United States last week refused to review the validity of the California air pollution law. In a brief per curium decision, the court dismissed a challenge to the law on the grounds that no substantial federal question had been raised. The California law regulates the amount of contaminants which may be discharged into the air by using the so-called Ringelmann Chart as a standard of measurement. Discharges creating a degree of opacity above a certain level measured by the chart are unlawful. Several other state laws and municipal ordinances have similar provisions.

Union Oil Company of California contested the constitutionality of the California law after being convicted of violating it eight times. The state supreme court sustained the convictions and the company appealed to the highest court on the grounds that the law was too vague and therefore invalid.

Ringelmann System Explained

It was explained that the Ringelmann system is a scheme whereby graduated shades of gray, varying from white to black, may be reproduced by a means of a rectangular grill of black lines of definite width and spacing on a white background.

The company said that it is just as impossible to measure opacity in terms of shade as it is to measure weight in terms of volume.

The state defended the law, however, and cited a number of similar cases where the courts have upheld various municipal and state smoke abatement regulations, including some which used the Ringelmann Chart to measure density of the contamination.

Air Pollution Control Association sought to participate in the pleadings before the supreme court by filing a motion to submit a brief as amicus curiae, but the court rejected it. The association's brief stressed the importance of a supreme court ruling on the constitutionality of the California law in view of the national interest in pollution.

The brief stated that if the Ringelmann standard of measuring opacity is declared constitutional it can be expected that the next several years will see a great many similar laws passed in the various cities and states regulating opacity by relationship to color or shade of color.

Synthetic Rubber Plant Is Planned in England

Goodyear Tire & Rubber Company and Firestone Tire & Rubber Co., both of Akron, Ohio, have made plans with two European concerns for the construction of a synthetic rubber plant near Southampton, England. Dunlop Rubber Company, Ltd., of England and Cie. Generale des Etablissements Michelin, of France, are the two European concerns.

The plant, under the auspices of the jointly-owned International Synthetic Rubber Co., Ltd., will have a yearly producing capacity of 40,000 to 50,000 tons.

PRESIDENTIAL AID: James Forrestal, vice-president and director of General Aniline & Film Corporation, New York, who has been named to the staff of the GAF president to represent him in Binghamton, Johnson City, Endicott and New York areas of the company's operations.

Atom Power Impact On Industry Foretold

As atomic power becomes competitive with that generated by burning fossil remains, it will extend the life of the mineral fuels for other important purposes. So reported Felix E. Wormser before the fortieth anniversary meeting of the National Industrial Conference Board, at the Waldorf-Astoria hotel, New York, last week.

Neil McElroy, president of Procter & Gamble Company, Cincinnati, Ohio, was elected chairman of NICB for a term of one year, succeeding Langbourne M. Williams, president of Freeport Sulphur Company. Mr. Williams will continue to serve as a trustee of the board.

Vice-chairmen elected at the same meeting for a one-year term are:—Charles M. White, president of Republic Steel Corporation, Cleveland, Ohio, and I. W. Wilson, president of Aluminum Company of America, Pittsburgh, Pa.

Mr. Wormser, who is assistant secretary for mineral resources of the Department of the Interior, indicated that "For heat and

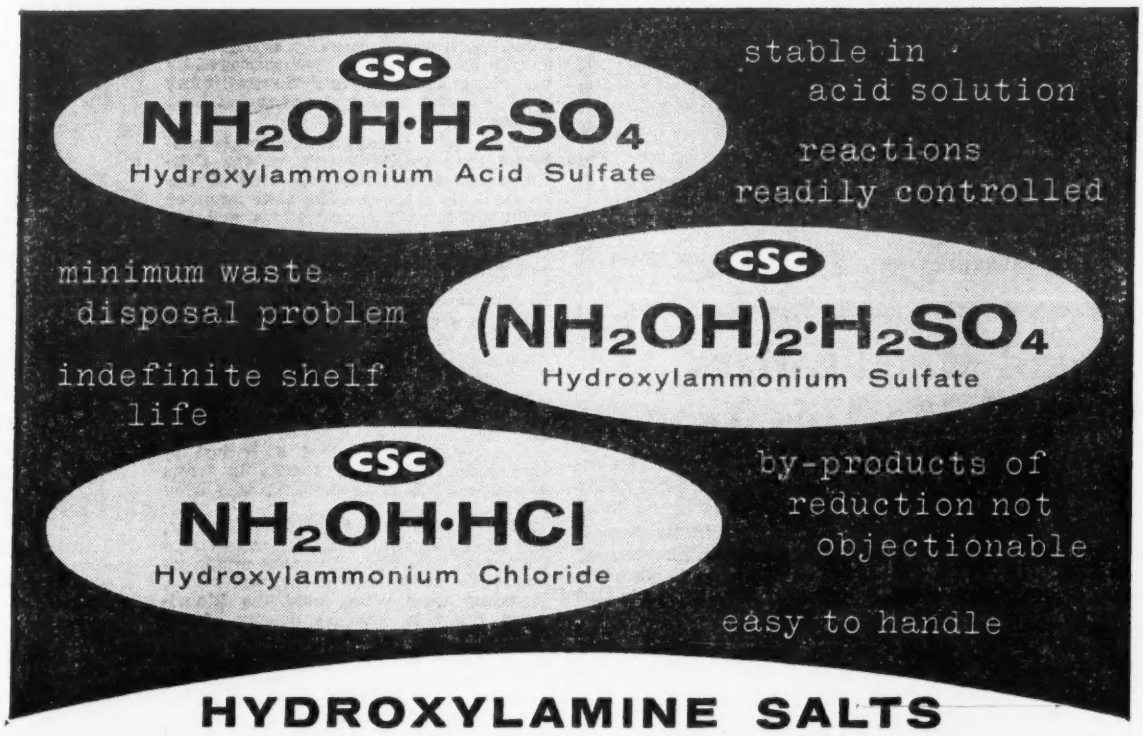
—Continued on page 78

J. W. Hayes

L. J. Jubanowsky

R. L. Vignolo

BAKER CASTOR OIL SALES MANAGERS: J. W. Hayes, appointed sales manager of Baker Castor Oil Company, New York, a subsidiary of National Lead Company, with overall charge of the concern's sales activities, L. J. Jubanowsky, named eastern sales manager, responsible for sales in the area east of the Rocky Mountains. R. L. Vignolo, made Pacific Coast sales manager in charge of sales activities west of the Rocky Mountains.



HYDROXYLAMINE SALTS

. . . outstanding chemicals . . . for purification . . . synthesis . . . now available in commercial quantities at moderate prices

Because of their wide range of utility, demand for these nitroparaffin derivatives is increasing rapidly and many potential applications are being explored. Hydroxylamines are recommended as *reducing agents* . . . in purification processes . . . in dyeing . . . in the production of synthetic fibers. In the photographic, ceramics, and mirror industries, they are considered particularly effective reducing agents for metal ions. Hydroxylamine salts are also mild oxidizing agents under some conditions.

The hydroxylamines are valuable for *chemical synthesis* such as in the production of synthetic fibers . . . dyes . . . pharmaceuticals . . . in the preparation of *anti-oxidants and stabilizers.* For example, hydroxylamine salts are valuable in the manufacture of anti-skinning agents for paint.

In the synthetic rubber industry, hydroxylammonium sulfate is a non-discoloring short-stopper in the manufacture of GR-N. Hydroxylammonium chloride is the *analytical reagent* of choice in determination of aldehydes and ketones.

The number of successful new applications of hydroxylamines grows almost daily.

PROPERTIES

	Hydroxylammonium Acid Sulfate	Hydroxylammonium Sulfate	Hydroxylammonium Chloride
Molecular weight	131.11	164.14	69.50
Melting point	Indefinite	177d	152d
pH of 0.1 M aqueous solution	1.6	3.7	3.4
Solubility g/100 g			
In water 25°C	390 approx.	63.9	94.7
In 95% Ethanol	4.3	0.2	10.5
In Methanol	20.2	0.1	17.5

The hydroxylamines are samples of outstanding nitroparaffin derivatives available from CSC. For samples and complete technical data, write to:

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CSC
INDUSTRIAL CHEMICALS

Association Meetings

Chemical and Allied Products Buyers' Group of the National Association of Purchasing Agents, Auditorium hotel, Cleveland, Ohio, May 22.

Chemical Market Research Association, annual meeting, Biltmore hotel, New York, May 22-23.

Chemical Specialties Manufacturers Association, mid-year meeting, Drake hotel, Chicago, May 20-22.

National Association of Purchasing Agents, annual convention, Public Auditorium, Cleveland, Ohio, May 20-23.

National Cottonseed Products Association, annual convention, Statler Hilton hotel, Dallas, Tex., May 21-22.

American Chemical Society, national meeting, Atlantic City, N. J., September 16-21.

American Institute of Chemical Engineers, William Penn hotel, Pittsburgh, Pa., September 9-12.

American Society for Testing Materials, annual meeting, Chalfonte-Haddon Hall, Atlantic City, N. J., June 16-21. Pacific area national meeting and apparatus exhibit, Statler hotel, Los Angeles, September 16-22.

American Soybean Association, joint convention with National Soybean Processors Association, University of Illinois, Urbana, Ill., August 13-15.

Chemical Institute of Canada, annual conference and exhibition, Mount Royal hotel, Montreal, May 28-30

Del-Mar-Va Peninsula Fertilizer Association annual convention, Ocean City, Md., June 30.

Drug, Chemical and Allied Trades Section of the New York Board of Trade, annual panel discussion and luncheon meeting, Biltmore hotel, New York, June 26; annual outing, Pocono Manor Inn, Pocono Manor, Pa., September 27-29.

Federal Wholesale Druggists Association, annual convention, Greenbrier hotel, White Sulphur Springs, W. Va., September 16-19.

Federation of Paint and Varnish Production Clubs, annual meeting, Cincinnati, Ohio, October 21-24.

International Organization for Standardization, council meeting, Geneva, Switzerland, July 16-21.

Manufacturing Chemists' Association, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., June 7-9

National Association of Retail Druggists, annual convention, Netherlands Plaza and Sheraton-Gibson hotels, Cincinnati, Ohio, September 17-21.

National Paint, Varnish and Lacquer Association, annual convention, Statler, Ambassador and Biltmore hotels, Los Angeles, November 12-14.

National Plant Food Institute, Greenbrier hotel, White Sulphur Springs, W. Va., June 10-13.

National Plastics Exposition, sponsored by Society of Plastics Industry, New Coliseum, New York, June 11-15.

Perkin Centennial, sponsored by American Association of Textile Chemists and Colorists, Waldorf-Astoria hotel, New York, week of September 10.

Pharmaceutical Council of Greater New York, drug, cosmetic and sundry show, Statler hotel, New York, September 23-25.

Salesmen's Association of the American Chemical Industry, sales clinic, Commodore hotel, New York, October 15.

Society of the Plastics Industry, annual conference, Commodore hotel, New York; annual exposition, Coliseum, New York, June 11-15.

Synthetic Organic Chemical Manufacturers Association, monthly luncheon, Roosevelt hotel, New York, June 12; annual meeting and dinner, Biltmore hotel, New York, December 3.

Plastics Unit Makes Plans For Annual New York Meeting To Coincide With Exposition

The Society of the Plastics Industry has set up a broad program for its annual conference, to be held June 11 through 15 in the Commodore hotel, New York, and coinciding with the society's seventh annual plastics exposition, to be held at the same time in the Coliseum. According to Walter J. A. Connor, conference chairman, and executive vice-president of the American Plastics Corporation, the conference will include sessions on cellular plastics and sheet forming, together with meetings concerning the automotive, refrigeration and air conditioning, packaging, building materials, and communications fields.

A special session will also be devoted to a management business symposium, and there will be a special retailers' luncheon.

Registration June 10

Conference registration will begin June 10, at 2 p.m. in the ballroom foyer of the Commodore hotel where all sessions will be held. Concurrent opening sessions will be devoted to cellular plastics in transportation (subway, aircraft, automobile, trains, and ships) and to sheet forming technics and applications.

On June 12 there will be a general introductory address at 9:30 a.m., to be followed by five keynote addresses concerned with the automotive, refrigeration and airconditioning, packaging, building materials, and communications fields. These talks will outline the more detailed presentations to be pursued during the next two days.

The morning of June 13 is to be devoted to three concurrent sessions:—Automotive, packaging, and building materials. Topics for the automotive session will include pre-mix molding, advances in body manufacturing technics, discussion of components such as trim and upholstery, and trends in automotive styling.

The packaging session will include talks on film, rigid plastics, protective coatings, a report on Food and Drug Administration legislation, and a session on packaging design.

A feature of the building session will be the presentation of the SPI house competition awards in the currently held competition for architects, draftsmen, designers, and architectural students for the development of unusual ideas for new uses of plastics in the construction of homes. The program will also include talks on

—Continued on page 79

Dr. Walter B. Shelley

Cosmetic Chemists Fete Larrick, Shelley

George P. Larrick, Commissioner of the Food and Drug Administration, and Dr. Walter B. Shelley, associate professor of dermatology at the University of Pennsylvania, received special tributes from the Society of Cosmetic Chemists at its annual meeting in New York last week.

Mr. Larrick received honorary membership in the society and Dr. Shelley received a special $1,000 award for a scientific paper offering the greatest potential to science.

The meeting also featured the presentation of seven scientific papers, abstracts of which follow:—

Perfume Materials in Thioglycolate Solutions

Edward Sagarin and Marvin Balsam*

A study of a representative group of aromatic chemicals and essential oils in thioglycolate hair-waving solutions disclosed a correlation between the odor stability of the individual ingredients and the effect of the latter on the stability of the hair-waving preparations.

Variables that must be taken into account included the clouding agent used (if any), the color used (if any), and the presence or absence of ammonia.

It was found that materials having a deleterious effect on a preparation when

—Continued on page 86

Plant Food Group Will Hear Sen. Fulbright at June Meeting

The National Plant Food Council has completed plans for its first annual convention, which will be held June 10 through 13 at the Greenbrier hotel, White Sulphur Springs, W. Va., and which will feature an address by Sen. J. W. Fulbright, chairman of the senate committee on banking and currency. The meeting will be attended by more than 1,000 persons, representing fertilizer manufacturers, material producers and others. Along with Sen. Fulbright, the program will feature prominent leaders in the fields of government, industry and agricultural communications.

Business Meetings First

Meetings of the executive committee and board of directors of the institute will be held on June 10 and the first general session will follow on June 11.

J. A. Howell of Richmond, Va., president of the institute will preside and the following speakers will be heard on June 11:—

Russell Coleman, executive vice-president of the institute, who will give a visual presentation on "One Year of Service."

Drs. J. M. Bohlen and G. M. Beal, associate professors of rural sociology, Iowa State College, who will give a visual demonstration on "Who Influences the Farmer?"

Glenn R. Fouche, president, Stayform Company, Chicago, who will speak on "Dramatize Your Selling."

A business meeting of the research and education committee will be held during the afternoon of June 11.

President Howel also will preside at the sessions on June 12, which will feature:—

The premiere showing of the institute's new movie, "What's in the Bag?"

The presentation of the institute's an-

—Continued on page 66

West End Expanding Its Facilities in Calif.

West End Chemical Company is expanding the sodium sulfate and salt cake facilities at its plant in Westend, Calif.

Anticipated capacity will be approximately double the present 50,000 tons for these products by January 1, 1957. Primary factor in West End's decision to erect a second sulfate unit is the expansion of the Kraft pulp industry, it was reported.

Cottonseed Group Opens Meeting Today

A speech entitled "What the Feed Manufacturer Wants in Cottonseed Meal" will be one of the features of the sixtieth annual convention of the National Cottonseed Products Association this week at the Statler Hilton hotel, Dallas, Tex. R. M. Bethke, vice-president of Ralston Purina Company, St. Louis, Mo., will report on the feed manufacturer and cottonseed meal before the first session, which meets today.

Also featured on today's agenda are a report by E. H. Lawton, president of the association, report of the research committee, by H. L. Craig, and a speech by the educational service committee director, A. L. Ward.

Tuesday's session will be keynoted by a speech, "Quo Vadis," by Trent C. Root, vice-president of Southern Methodist University, and an address by Charles B. Shuman, president of American Farm Bureau Federation, Chicago, on "The Farm Problem in a Political Setting."

Various committee and officer reports will also be heard on Tuesday.

AEC Asks Congress To Insure Atom Plants

The Atomic Energy Commission has asked congress to underwrite the liabilities involved in a privately-owned atomic energy industry to remove one of the major deterrents to development of nuclear power by private interests.

Proposals advanced by the commission, however, ran into strong criticism last week from the congressional committee on atomic energy where chairman Clinton P. Anderson of New Mexico said that the plan appeared to provide protection only for the stockholders of the companies owning the atomic power plants, and no protection for the people who might be

—Continued on page 83

EDTA, Other Indicators Are Offered by J. T. Baker

A reagent grade of ethylenediamine tetraacetic acid (EDTA) and of disodium ethylenediamine tetraacetate dihydrate, along with associated indicators, are now available from J. T. Baker Chemical Company, Phillipsburg, N. J.

These reagents have a diversity of uses in the chelation of ions, especially of bi- and trivalent metals, and their titrimetric determination.

EDTA and its disodium salt (dihydrate) are offered by Baker in crystalline form

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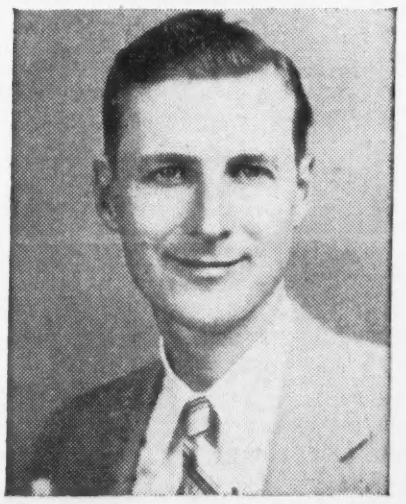
CHEMICAL DEVELOPMENT MANAGERS: Arthur S. Weygandt (right), named manager of the central development department of Food Machinery & Chemical Corporation's chemical divisions, with headquarters in New York. William D. Morrison (left), appointed manager of foreign chemical development for the FMC chemical divisions, a new post, also in New York.



Why you should use 'ROCHE' THIAMINE

HYDROCHLORIDE AND MONONITRATE
(vitamin B_1)

Here are ten persuasive reasons why 'Roche' thiamine should be your choice for pharmaceutical manufacturing

1. **U. S. P.** Both 'Roche' thiamine hydrochloride and mononitrate equal or exceed U. S. P. specifications.

2. **TWO TYPES.** Roche has *two types* of thiamine hydrochloride available for you:

   Regular—*for tablets, capsules, dry and liquid nutritive supplements and multivitamin preparations.*

   Ampul—*specially prepared for use in manufacturing parenteral solutions.*

3. **SPECIAL PROBLEMS.** Roche has thiamine mononitrate to help you meet unusual stability problems which can occur in dry cereal or pharmaceutical products. Also it may have advantages in certain pharmaceutical products where the pH range is above the safe level for the hydrochloride.

4. **STEADY SUPPLY.** Because Roche makes *quality* thiamine by the tons, you can be sure of a steady, *quality* supply.

5. **RESEARCH.** Continuing world-wide research brings you the latest developments in vitamin knowledge.

6. **PRODUCTION CONTROL.** Scientific production control assures you of consistent, highest quality.

7. **QUICK DELIVERY.** Every order receives prompt careful service from convenient points. Transportation at lowest rate allowed and prepaid to destination. Special routings at cost. And you *know* you can count on our promises.

8. **PACKAGING.** Packed in polyethylene bags in ½ and 1-kilo tamper-pruf metal containers and in fibre drums up to 20 kilos for the hydrochloride, 35 kilos for the mononitrate. Small quantities in amber S.C. bottles. *Ampul type* thiamine hydrochloride is sealed under inert gas in 100 gram S.C. bottles and in ½ and 1-kilo tamper-pruf metal containers.

9. **KNOW-HOW.** Roche know-how on vitamins can help you with solutions to compounding and packaging problems.

10. **SAMPLES** and technical assistance are yours on request. Ask your Roche salesman or write the Vitamin Division.

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CHEMICALS AND RELATED MATERIALS

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Current MARKET Quotations

Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, May 18 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

A

Acacia (see Gum arabic).
Acenaphthene, below 92.5 C., m.p., dms., works lb. .40 - —
above 92.5 C., m.p., bbls., dms., lb. .41 - .50
Acetaldehyde, 99%, dms., c.l., dlvd. lb. .12 - —
l.c.l., dlvd lb. .13½- —
tanks, dlvd lb. .10 - —
Acetaldol (see Aldol).
Acetanilide, tech., flaked, bbls., bgs., c.l., frt. alld lb. .29 - —
ton lots lb. .30 - —
smaller lots lb. .33 - —
USP, bbls., 2,000-lb. lots lb. .80 - —
smaller lots lb. .81 - .89
Acetic anhydride, dms., c.l., dlvd. E. lb. .15½- —
l.c.l., dlvd. E lb. .17 - —
tanks, dlvd. E lb. .14 - —
Acetoacetanilide, fib. dms., c.l., dlvd lb. .80 - —
l.c.l., dlvd lb. .81 - —
Acetoacet-o-chloroanilide, fib. dms., c.l., dlvd lb. 1.35 - —
l.c.l., dlvd lb. 1.36 - —
Acetoacet-o-toluidide, fib. dms., c.l., dlvd. lb. .82 - —
l.c.l., dlvd lb. .83 - —
Acetone, CP, dms., c.l., dlvd lb. .10½- —
l.c.l., dlvd lb. .11½- —
tanks, dlvd lb. .08 - —
Methyl (see M).
Acetonitrile, dms., c.l., works lb. .45 - —
l.c.l., works lb. .47 - —
Acetophenetidin, USP, bbls., works, frt. equald lb. 1.17 - 1.19
Acetophenone, cns., dms lb. 1.21 - 1.35
tech., dms., l.c.l., works lb. .75 - —
N-Acetyl-p-aminophenol, dms., frt. adjusted lb. 1.75 - 1.89
Acetyltributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .36 - —
l.c.l., frt. alld. E. of Denver lb. .35 - —
tanks, frt. alld. E. of Denver, lb. .33 - —
Acetyltriethyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .39 - —
l.c.l., frt. alld E. of Denver, lb. .40 - —
tanks, frt. alld. E. of Denver, lb. .37 - —
Acetyltri-2-ethylhexyl citrate, non-ret. dms., frt. alld lb. .60 - —
Acid, abletic, coml., dms., c.l., works lb. .12 - —
l.c.l., ex whse lb. .1490- —
cryst., dms., c.l. works lb. .06½- —
l.c.l., works lb. .07 - .07½
Acetic, coml., or redist., 28%, bbls. 100 lbs. 4.80 - —
56%, bbls 100 lbs 6.25 - —
70%, bbls 100 lbs. 9.95 - —
80% bbls 100 lbs.10.45 - —
glacial, syn., CP, dms., dlvd. 100 lbs.15.00 -16.00
tech., dms., c.l., dlvd 100 lbs.12.00 - —
l.c.l., dlvd 100 lbs.13.00 - —
tanks, dlvd 100 lbs.10.00 - —
USP cbys., inclusive, dlvd., 100 lbs.24.00 -25.00
Acetic anhydride (see Acetic anhydride above).
Acetylsalicylic, USP, special, makers, primary distrib., bbls., 1,000-lb lots, point of shipt lb. .61 - —
standard, fine, cryst., gran., (30-40 mesh) powd., (60 mesh) bbls., 1,000-lb. lots, lb. .56 - .58
Freight equald, shipt. identical quantity over standard routes, from N. Y., Phila., Midland, Mich., Chicago and St. Louis.
Adipic, bgs., c.l., dlvd lb. .32 - —
l.c.l., dlvd lb. .34¾- —
Aminoacetic, NF, bbls., frt. adjusted lb. 1.50 - 1.75
p-Aminobenzoic, tech., dry, dms., works lb. 1.74 - 1.77
USP, dms., 1,000-lb. lots or more, works lb. 2.50 - —
smaller lots, works lb. 2.55 - 2.60
p-Aminosalicylic, dms., 1,000-lb. lots or more, frt. adjusted lb. 4.25 - —
smaller lots, same basis lb. 4.50 - 4.75
Anthranilic, 99%, 150-lb. dms., dlvd. lb. 1.10 - —
Arsenous, tech. (see Arsenic, white).
USP (see Arsenic trioxide).
Ascorbic USP, dms., 25-100 kilo lots kilo.12.60 - —
10-kilo lots kilo.12.35 - —
5-kilo lots kilo.12.75 - —
bots 1-kilo lots kilo.13.00 - —
500-gram lots kilo.13.50 - —
Battery, cbys., c.l., works, E. 100 lbs. 2.35 - —
l.c.l., works, E 100 lbs. 2.65 - 3.45

Acacia—Acid, L

Acid, benzoic, tech., bbls., dms., 100-lb. lots or more lb. .44 - —
USP, bbls., dms., 100-lb. lots or more lb. .54 - —
Betahydroxynaphthoic (see Acid, b-Oxynaphthoic).
Betaoxynaphthoic (see Acid b-Oxynaphthoic).
Boric, tech., 99.9%, cryst., bgs., c.l., works ton.126.75 - —
ton lots, ex whse, N. Y. or Chi ton.116.50 - —
smaller lots, same basis. ton.181.50 - —
dms., c.l., works ton.151.25 -172.23
ton lots, ex whse. N. Y. or Chi ton.201.00 -222.00
smaller lots, same basis. ton.206.00 -227.00
gran., bgs., c.l., works ton.101.75 - —
ton lots, ex whse. N. Y. or Chi ton.151.50 - —
smaller lots, same basis. ton.156.50 - —
dms., c.l., works ton.126.23 -147.23
ton lots, ex whse. N. Y. or Chi ton.176.00 -197.00
smaller lots, same basis. ton.181.00 -202.00
bulk, c.l., works ton.95.75 - —
Acid, boric, tech., 99.9%, powd., bgs., c.l., works ton.106.75 - —
ton lots, ex whse. N. Y. or Chi ton.156.50 - —
smaller lots, same basis. ton..161.50 - —
dms., c.l., works ton.131.25 -152.25
ton lots, ex whse., N. Y. or Chi ton.181.00 -202.00
smaller lots, same basis. ton.186.00 -207.00
Boric acid in kegs $45.50 per ton higher than in paper bgs. USP boric Acid $25 per ton higher.
Broenners, bbls lb. 1.76 - —
Butyric, 99%, dms., c.l., works lb. .34 - —
l.c.l., works lb. .34½- —
tanks, works lb. .32½- —
Capric, dms lb. .25 - .27
Caprylic, dms lb. .25 - .27
Cassella, dms., frt. alld., 100% basis lb. 1.44 - 1.75
Castor oil, split, dms lb. 35½ - .36
Chicago, paste, bbls., frt. alld lb. 3.21 - —
Chloroacetic, mono, purif., flake, 99%, dms lb. .23½- .25½
tech., flake, 96-97%, dms., frt. equald lb. .20 - .21
o-Chlorobenzoic, fib. dms., t.l., works lb. 1.10 - —
smaller lots, works lb. 1.25 - —
Acid, p-chlorobenzoic, fib. dms., 2,000 lbs. or more, works lb. 2.28 - —
less than 2,000 lbs., same basis. lb. 2.30 - —
Chlorosulfonic, dms., c.l., frt. equald lb. .04¾- —
l.c.l., frt. equald lb. .05½- —
tanks, frt. equald lb. .04½- —
Acid, chlorosulfonic, in stainless steel dms. ½c. per lb. higher.
Chromic, 99¾%, dms., c.l., works, frt. equald lb. .28½- —
l.c.l., dlvd., N. Y. metropolitan area lb. .29 - .30
NF (see Chromium trioxide).
Cinnamic, refd., bots lb. 2.50 - 3.50
Citric, USP, anhyd., gran., fine gran., bgs., dms., c.l. lb. .29½- .30
10,000-lb. lots, 1 shipt, lb. .30 - .30½
smaller lots lb. .30½- .31
hydrous, gran., fine gran., bgs., dms., c.l lb. .27½- .28
10,000-lb. lots, 1 shipt, lb. .28 - .28½
smaller lots lb. .29 - .29½
Powdered citric acid ½c. higher.
Cleve's, mixed, bbls lb. .79 - —
Coconut oil, dist., dms lb. .25 - .27
tanks lb. .23 - —
dbl. dist., dms lb. .25 - .27
tanks lb. .23 - .24
Corn oil, dist., dms lb. .16¾- .18¾
tanks lb. .14¾- —
Cottonseed oil, dist., dms lb. .15¾- .17¾
tanks lb. .13¾- —
2,3-Cresotic, dms., ton lots, works, lb. .70 - —
less than ton lots, works lb. .72 - —
Cresylic, coaltar, dom., 50%, 207° C. or above, resin and trieresyl phosphate grade, tanks, frt. equald gal. 1.10 - —
50% 210° C. or above, total range over 9° C., non-resin grade, dms., c.l., same basis gal. 1.13 - —
l.c.l., same basis gal. 1.19 - —
tanks, same basis gal. 1.00 - —
50% 204° to 207° C., tricresyl phosphate and resin grade, tanks, same basis, gal. 1.20 - —
imp., 75% at 215°C., or over, dms., ex whse gal. .95 - —
petroleum, dom., 195° to 214°C., non-ret. dms., 65 to c.l., works, San Francisco and Los Angeles gal. .80 - —
l.c.l., same basis gal. .82 - .84
tanks, same basis gal. .63 - —
200° C. to 222° C., tanks, Wilmington, Cal lb. .63 - .72
211° C. to 237° C., non-ret. dms., c.l., San Francisco and Los Angeles gal. .76 - —
l.c.l., same basis gal. .78 - .80
tanks, same basis gal. .61 - —
220° C. to 242° C., tanks, Wilmington, Cal lb. .62 - .67
245° C. to 295° C., tanks, Wilmington, Cal gal. .50 - —
Crotonic, fib. dms., 200 lbs. or more, contained, works lb. .50 - —
Cyanoacetic, tech., bbls. lb. .90 - 1.23
Dichlorophenoxyacetic (see 2,4-D).
Diethylbarbituric (see Barbital).
Diglycolic, bgs., works lb. .14 - —
Dithiodibenzoic, dms., 1,000-lb. lots, works lb. 1.45 - —
2-ethyl hexoic, dms., c.l., dlvd lb. .36½- —
l.c.l., dlvd. lb. .37½- —
tanks, dlvd lb. .34½- —
F, crude, paste, bbls., works lb. 2.10 - —
Folic, bots., fib. cns. kilo-lots or more gram. 1.40 - —
Formic, 85%, cbys., c.l., works lb. .1570- —
l.c.l., works lb. .1620- .1720
90%, cbys., c.l., works lb. .1625- —
l.c.l., works lb. .1675- .1775
Fumaric, tech., bgs., dms., c.l., frt. alld. E lb. .25½- —
l.c.l., same basis lb. .26½- —
Gallic, NF VII, bbls., 1,000-lb. lots, lb. 1.80 - —
smaller lots lb. 1.82 - 2.00
tech., bbls., 1,000-lb. lots lb. 1.56 - —
smaller lots lb. 1.82 - 2.00
Gamma, dry, grd., bbls., frt. alld. lb. 1.50 - —
paste, bbls., frt. alld lb 1.45 - —
Gentisic, 100-lb. fib. dms lb 8.50 - —
Gluconic, tech., 50% bots lb. .25 - .35
cbys. lb. .19 - —
dms. lb. .15½- —
l-Glutamic, 99½% fib. dms., 100-lb. lots, works lb. 2.00 - —
25-lb. lots, works lb. 2.05 - —
Glycolic (see Acid hydroxyacetic).
H, dry, bbls., c.l., works, 100% basis lb. 1.00 - —
l.c.l., same basis lb. 1.02 - —
Hydriodic, 1.50 s.g., cbys lb. 2.94 - —
1.70 s.g., cbys lb. 3.23 - —
Hydrobromic, medicinal, 48%, cbys., dlvd. E lb. .37 - .43
Hydrochloric, anhyd. (see Hydrogen chloride).
18° cbys., c.l., works 100 lbs. 2.50 - —
l.c.l., dlvd., Metropolitan area 100 lbs. 2.90 - 3.05
tanks, works, frt. equald ton.28.00 - —
20° cbys., c.l., works 100 lbs. 2.75 - —
l.c.l., dlvd., Metropolitan area 100 lbs. 3.15 - —
tanks, works, frt. equald ton.30.00 - —
22° cbys., c.l., works 100 lbs. 3.25 - —
l.c.l., dlvd., Metropolitan area 100 lbs. 3.65 - —
tanks, works, frt. equald ton.35.00 - —
CP, USP, consumers, cbys., extra, c.l., works lb. .11¾- —
l.c.l., same basis lb. .13¼- .13¾
5-pint bots., extra, cs., c.l., same basis lb. .16¾- —
l.c.l., same basis lb. .18¼- .19¼
Acid, hydrochloric, CP, USP, prices to dealers 1½c. per lb. less.
Hydrocyanic, cyls., frt. alld lb. .75 - .93
dilute, NF, 2%, 5-lb. bots lb. .40 - —
Hydrofluoric, anhyd. (see Hydrogen fluoride).
aqueous, tanks, works lb. .21 - —
70%, steel, dms., works lb. .18½- .22½
Hydrofluosilicic, dms., works, 30% basis lb. .06 - —
Hydroxyacetic, tech., 70%, non-ret. bbls., Phila., 100% basis lb. .136 - —
tanks, Belle, W. Va., 100% basis lb. .093 - —
Hypophosphorus, purif., 50%, cbys lb. 1.30 - 1.32
USP, cbys. lb. .88 - —
Isonicotinic, 100-lb. fib. dms., works lb. 5.90 - —
Hydrazide (see Isoniazid).
Itaconic, tech., fib. dms., c.l., works lb. .43 - —
l.c.l., works lb. .44 - —
purif., fib. dms., c.l., works lb. .53 - —
l.c.l., works lb. .54 - —
J, paste bbls., works, 100% basis. lb. 2.45 - —
powd., bbls., same basis lb. 2.50 - 2.85
Koch, bbls., frt. alld., 100% basis. lb. 1.00 - —
L, bbls., works lb. 1.25 - —

Abbreviations

Used in OPD Market Quotations

alld.	allowed	distr.	distributor	NNR	New and Nonofficial Remedies
amorph.	amorphous	djns.	demijohns		
AMP	American melting point	dlvd.	delivered	No.	number
		dms.	drums	nom.	nominal
anhyd.	anhydrous	dom.	domestic	o-	ortho
a.p.a.	available phosphoric acid	E.	east	ord.	ordinary
		e.p.	end point	oz.	ounce
approx.	approximately	equald.	equalized	p-	para
artif.	artificial	exp.	expressed	Pac.	Pacific
ASTM	American Society for Testing Materials	F.	fahrenheit	pf.	proof
		ferment.	fermentation	phos.	phosphate
		f.f.a.	free fatty acid	photo.	photographic
Atl.	Atlantic	f.f.c.	free from chlorine	pkgs.	packages
Be.	Baume			powd.	powdered
bbls.	barrels	fib.	fiber	precip.	precipitated
bgs.	bags	f.o.b.	free on board	prod.	producer
bls.	bales	f.p.a.	free of prussic acid	pt.	point
bots.	bottles			pulv.	pulverized
b.p.	boiling point	frt.	freight	purif.	purified
b.p.l.	bone phosphate of lime	gal.	gallon	redist.	redistilled
		gran.	granular	refd.	refined
b.r.	boiling range	grd.	ground	refy.	refinery
bxs.	boxes	I.&a.	iron and aluminum	reg.	regular
				resub.	resublimed
C.	centigrade	l.b.p.	initial boiling point	ret.	returnable
cbys.	carboys			SD	specially denatured
CD	completely denatured	imp.	imported		
		incl.	included	s.d.	single distilled
c.i.f.	cost, insurance, freight	indust.	industrial	S. E.	southeast
		kgs.	kegs	sec.	secondary
cks.	casks	l-	laevo	secs.	seconds
c.l.	carlots	lacq.	lacquer	s.g.	specific gravity
cns.	cans	lb.	pound	ship't	shipment
coml.	commercial	l.c.l.	less than carlots	soln.	solution
conc.	concentrated	l.t.l.	less truckload	s.u.	standard unit
CP	chemically pure	liq.	liquid	syn.	synthetic
				tanks.	railroad tankcars
cps.	centipoises	mfrs.	manufacturers	tech.	technical
cryst.	crystal	m-	meta	tert-	tertiary
cs.	cases	m.a.p.	mixed aniline point	t.l.	truck loads
ctns.	cartons			t.w.	tank wagons
cyls.	cylinders	min.	minimum	USP	U. S. Pharmacopoeia
		m.p.	melting point		
d-	dextro	N-	nitrogen	vis.	viscosity
dbl.	double	n-	normal	VM&P	varnish makers & painters
denat.	denatured	nat.	natural		
dest-dist.	destructive-distilled	neut.	neutral	W	west
		NF	National Formulary	whse.	warehouse
dl-	dextro-laevo			w. w.	water-white
dist.	distilled				

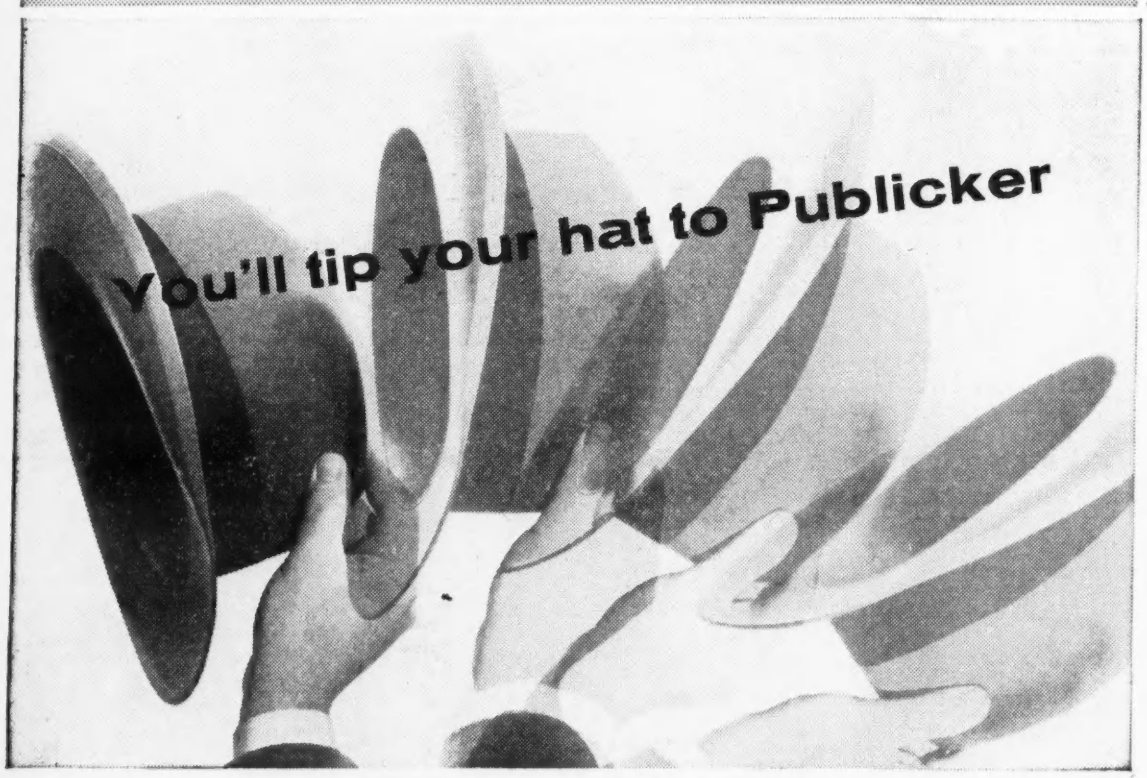
A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

Acid, lactic, edible, 50%, bbls., 20 or more lb. .1754- .215
smaller lots lb. .1854- .225
80%, bbls., 5 or more lb. .3054- .37
smaller lots lb. .3104- .375
plastic grade, 50%, bbls., 20 or more, works lb. .23 - —
1 to 19 lb. .235 - —
80%, bbls., 5 or more lb. .385 - —
tech., 22%, bbls., c.l., works 100 lbs. 6.30 - —
l.c.l., works 100 lbs. 6.70 - —
cbys., l.c.l., works 100 lbs. 12.20 - —
44%, bbls., c.l., works 100 lbs. 11.45 -11.95
l.c.l., works 100 lbs. 11.85 -12.35
USP, 85%, cbys. lb. .85 - .88
Laurent's, bbls lb. .69 - —
Lauric, 90%, dms lb. .36½- .38½
Linseed oil, dist., dms lb. .2230- —
w.w., dms. lb. .2530- —
Maleic, cryst., powd., dms lb. .37 - .38
Malic, tech., dms lb. .50 - —
Mandelic, NF, dms., 1,000-lb. lots lb. 2.35 - —
smaller lots lb. 2.40 - 2.50
Metanilic, dms., works lb. .57 - .75
Methacrylic, glacial, 98%, dms., truckloads, works lb. .54½- —
smaller lots, works lb. .55 - —
Molybdic, 85%, dms., works lb. 1.15 - —
Monochloroacetic, purif. (see Acid, Chloroacetic mono-).
Muriatic (see Acid, hydrochloric).
Myristic, dms lb. .25 - .27

Acid, 1-Naphthol-4-sulfonic (see Acid, Neville and Winthers).
1-Naphthol-5-sulfonic (see Acid, L).
1-Naphthol-5-sulfonic, 8-amino (see Acid, S).
1-Naphthol-3,6-disulfonic, 8-amino (see Acid, H).
2-Naphthol-6,8-disulfonic (see Acid, Gamma).
5-Naphthol-7-sulfonic, 2-amino (see Acid, J).
Naphtholsulfonic, mixed (see Acid, Cleve's).
1-Naphthylamine-5-sulfonic (see Acid, Laurent's).
2-Naphthylamine-4,8-disulfonic (see Acid, Cassella).
2-Naphthylamine-6-sulfonic (see Acid, Broenner's).
2-Naphthylamine-7-sulfonic (see Acid, F).
2-Naphthylamine-1-sulfonic (see Acid, Tobias).
Nevile and Winther's, dms., frt. alld lb. 1.20 - —
Nicotinic, USP, dms., dlvd kilo. 8.00 - 8.30
Amide, USP (see Nicotinamide).
Nitric, 36° Be, cbys., c.l., works, E 100 lbs. 5.75 - —
l.c.l., works, E 100 lbs. 6.05 - 6.85
38° Be, cbys., c.l., works, E. 100 lbs. 6.25 - —
l.c.l., works, E 100 lbs. 6.55 - 7.35
40° Be, cbys., c.l., works, E. 100 lbs. 6.75 - —
l.c.l., works, E 100 lbs. 7.05 - 7.85
42° Be, cbys., c.l., works, E. 100 lbs. 7.25 - —
l.c.l., works, E 100 lbs. 7.55 - 8.35
58.5 to 68% HNO_3, tanks, works, 100% basis 100 lbs. 3.90 - —
94½ to 95½% HNO_3, tanks, works, 100% basis 100 lbs. 4.90 - —

Acid, nitric, CP, NF, consumer, cbys., extra, c.l., works lb. .13½- —
l.c.l., same basis lb. .11¼- .11¾
8-pt. bots, extra, cs., c.l., same basis lb. .17½- —
l.c.l., same basis lb. .14¾- .20¾
p-Nitrobenzoic, dms., c.l., works. lb. .72 - —
l.c.l., works lb. .73 - —
Oleic, s.d., dms lb. .18½- .20½
tanks lb. .16½- —
dbl. dist. (white), dms. lb. .20½- .22½
tanks lb. .18½- —
Oleum (see Acid, sulfuric, fuming).
Orthochlorobenzoic (see Acid, o-Chlorobenzoic).
Orthocresotinic (see Acid, 2,3-Creosotic).
Oxalic, bbls., c.l., works lb. .16½- —
10,000-lb. lots, works lb. .16¾- —
smaller lots, works lb. .17¾- —
b-Oxynaphthoic, fib. dms., 250 lbs. or more, frt. alld lb. 1.14 - 1.17
Palm, dist., dms lb. .14¾- .16¾
tanks lb. .12¾- —
Para-aminobenzoic (see Acid, p-Aminobenzoic).
Para-aminosalicylic (see Acid, p-Aminosalicylic).
Parachlorobenzoic (see Acid, p-Chlorobenzoic)
Paramethylphenylcinchonic (see Neocinchophen)
Paranitrobenzoic (see Acid, p-Nitrobenzoic)
Paratoluidinmetasulfonic (see Acid, p-Toluidine m-sulfonic)
Phenylacetic, pure, cryst., cns. lb. .75 - 1.70
Phenylcinchoninic (see Cinchophen).
Phenylglycolic (see mandelic).
Phosphoric, food grade, 75%, cbys., c.l., frt. alld. E. 100 lbs. 6.75 - —
l.c.l., works 100 lbs. 7.00 - 8.00
tanks, works 100 lbs. 5.35 - —
80%, cbys., c.l., frt. alld. 100 lbs. 7.60 - —
l.c.l., works 100 lbs. 7.85 - 9.10
NF, 85%, cbys., c.l., works lb. .0825- —
l.c.l., works lb. .0850- .0975
tanks, works lb. .0640- —

Acid, picric, NF, bbls lb. .60 - —
tech., bbls lb. .34 - .38
Propionic, syn., pure, dms., c.l., frt. alld lb. .22¾- —
l.c.l., frt. alld lb. .23¾- —
tanks, frt. alld lb. .20¾- —
Pyrogallic, NF, (see Pyrogallol).
tech., bbls lb. 2.76 - 2.99
Ricinoleic (see Acid, castor oil, split).
S., bbls., works lb. 3.25 - —
Salicylic, crude, fib. dms., c.l., frt. alld lb. .35 - —
l.c.l., frt. alld. on 100 lbs. or more lb. .36 - —
sublimed, tech., fib. dms., c.l., dlvd lb. .37 - —
l.c.l., dlvd. lb. .41 - —
USP, cryst., fib. dms lb. .48 - —
powd., fib. dms lb. .55 - —
Sebacic, purif., dms., c.l., works lb. .59 - —
l.c.l., works lb. .61 - .65
Soybean oil, dbl. dist., dms lb. .18¾- .20¾
tanks lb. .16¼- —
s.d., dms lb. .17¼- .19¼
tanks lb. .15¼- —
Stearic, dbl. pressed, bgs lb. .15¼- .17¼
single pressed, bgs lb. .14¾- .16¾
triple pressed, bgs lb. .17½- .19½
Succinic, purif., cryst., bbls., works lb. .62 - .75
Sulfanilic, tech., dms., c.l., frt. alld lb. .19 - —
l.c.l., frt. alld lb. .21 - —
Sulfuric, 60° Be, cbys., c.l., works 100 lbs. 2.00 - —
l.c.l., works 100 lbs. 2.45 - —
tanks, works ton 18.60 - —
66° Be, cbys., c.l., works. 100 lbs. 2.25 - —
l.c.l., works 100 lbs. 2.55 -3.35
tanks, works ton 22.35 - —
98%, tanks, works ton 23.50 - —
99-100%, tanks, works ton 23.95 - —
CP, NF, consumers, cbys., extra, c.l., works, frt. equald lb. .09¾- —
l.c.l., same basis lb. .11¼- .11¾
8-pt. bots., extra cs., c.l., works, frt. alld lb. .13¼- —
l.c.l., same basis lb. .14¾- .20¾
fuming (oleum), 20%, tanks, works ton 25.00 - —
40%, tanks, works ton 29.00 - —
65%, tanks, works ton 39.50 - —
Tall, dms., c.l., works lb. .09 - .09½
tanks, works lb. .07½- .08
Tallow, dist., dms lb. .15¼- .17¼
tanks lb. .13¼- —
hydrogenated, dms lb. .14¼- .16¼
Tannic, NF, fluffy, bbls., 1,000-lb. lots lb. 2.05 - —
smaller lots lb. 2.06 - 2.10
powd., bbls., 1,000-lb. lots lb. 1.95 - —
smaller lots lb. 1.96 - 2.01
tech., dms lb. 1.05 - —
Tartaric, USP, dom., 230 or 250-lb. dms., c.l. lb. .47 - —
10,000-lb. lots, 1 shipt lb. .47½- —
smaller lots lb. .48 - —
100-lb. dms. lb. .49 - —
imported lb. .39½- .40
Thioglycolic, refd., cbys., 100% basis lb. 1.35 - 1.55
Thiosalicylic, purif., dms., 1,000-lb. lots, works lb. 4.00 - —
Tobias, bbls., frt. alld lb. .81 - —
Toluenesulfonic, dms., c.l., works, lb. .16 - —
l.c.l., works lb. .17½- —
p-Toluene sulfonic, monohydrate, dms., c.l., or t.l. lb. .90 - —
125 lbs. to t.l. lb. 1.00 - —
p-Toluidine-m-sulfonic, bbls., works lb. .92 - 1.04
Trichloroacetic, bots. lb. 2.00 - 2.50
Trichlorophenoxyacetic (see 2,4,5-T).
Tungstic, tech., kgs., works lb. 4.25 - —
Undecylenic, dms lb. 1.40 - —
Aconite root, bls lb. .50 - .55
Acrolein, tech., dms., c.l., works lb. .47 - —
l.c.l., works lb. .47½- —
tanks, works lb. .46 - —
Acrylonitrile, dms., c.l., t.l., works, lb. .30 - —
l.c.l., l.t.l., works lb. .31 - —
tanks, works lb. .27 - —
ACTH, cryst., bulk, 1,000 units/gram, bots. gram 15.00 - —
Adeps lanae (see Lanolin).
Adrenocorticotropic hormone (see ACTH).
Agar, USP, Kobe No. 1, strip, bls. lb. 3.00 - 3.25
powdered, 30 mesh, fib., dms lb. 3.40 - 3.50
dl-Alanine, dms., works lb. 8.50 -11.00
Albumin, blood, dark (see Blood, dried, soluble).
light, dms. lb. .65 - .90
Egg, edible, cryst., powd., bbls. lb. 2.09 - 2.11
flake lb. 2.04 - 2.06
tech., cryst., bbls lb. .98 - 1.00
Alcohol, allyl, dms., c.l. dlvd lb. .32 - —
l.c.l., dlvd lb. .33 - —
tanks, dlvd lb. .30 - —
Amyl, ex fusel oil (see Fusel oil, refd.)
ferment., refd., 128°-132°C., dms., l.c.l., dlvd lb. .43 - —
ACS grade, dms., l.c.l., dlvd lb. .45 - —
ex-pentane, mixed, amyls, dms., c.l., frt. alld lb. .18 - —
l.c.l., frt. alld lb. .19 - —
tanks, frt. alld lb. .15½- —
primary, dms., c.l., frt. alld. lb. .19¼- —
l.c.l., frt. alld lb. .20¼- —
tanks, frt. alld lb. .17¼- —
sec-synthetic, dms., c.l., works, frt. alld lb. .18½- —
l.c.l., works lb. .19½- —
tanks, works lb. .16½- —
tert-synthetic, dms., c.l., frt. alld. E lb. .18 - —
l.c.l., frt. alld E lb. .19 - —
tanks, frt. alld E lb. .15½- —
1-pentanol, (syn. normal), dms., c.l., works lb. .41½- —
l.c.l., works lb. .42½- —
tanks, works lb. .39½- —
3-pentanol, dms., c.l., works lb. .65 - —
l.c.l., works lb. .70 - —
tanks, works lb. .60 - —
Benzyl, NF, dms lb. .64 - .79
tech., dms., dlvd lb. .47½- .49
n-Butyl, ferment., dms., c.l., frt. alld lb. .16 - —
l.c.l., frt. alld lb. .17 - —
tanks, frt. alld lb. .13½- —
synthetic, dms., c.l., dlvd lb. .16 - —
l.c.l., dlvd lb. .17 - —
tanks, dlvd lb. .13½- —
sec-synthetic, dms., c.l., dlvd. lb. .13½- —
l.c.l., dlvd lb. .14½- —
tanks, dlvd lb. .11½- —
tert-synthetic, dms., c.l., frt. alld. lb. .14 - —
l.c.l., frt. alld lb. .15 - —
tanks, frt. alld lb. .12 - —
Capryl, 95%, dms., c.l., works lb. .21½- —
l.c.l., works lb. .22½- .23¼
tanks, works lb .19½- —
Cetyl, extra, fib. cns., 500-lb. lots or more lb. .65 - .72
NF, fib. cns., 140-lb. lots or more lb. .48 - —
Cinnamic, bots lb. 2.15 - 2.75
Decyl mixed isomers, dms., c.l., dlvd lb. .23½- —
l.c.l., dlvd lb. .24½- —
tanks, dlvd lb. .21 - —
normal (see 1-Decanol).



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★ *Ethyl Alcohol*
★ *Butyl Alcohol*
★ *Butyl Acetate*
★ *Acetaldehyde*
★ *Butadiene*
★ *Ethyl Acetate*
★ *Amyl Acetate*
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CHICAGO—RANDOLPH 6-6678 • CLEVELAND—CHERRY 1-6140

Alcohol, denat., CD12, CD13, CD14, CD17, dms., c.l., dlvd. E. of Rockies gal. .59½- —
l.c.l., same basis gal. .64½- .70½
tanks, dlvd., same basis gal. .43½- —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Div.

Proprietary solvent, dms., c.l., dlvd. E. of Rockies gal. .62 • —
l.c.l., same basis gal. .66 • .72
tanks, same basis gal. .45 • —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Div.

SD1, dms., c.l., dlvd. E. of Rockies gal. .60½- —
l.c.l., same basis gal. .65½- .71½
tanks, same basis gal. .44½- —

SD2B, dms., c.l., dlvd. E. of Rockies gal. .59 • —
l.c.l., same basis gal. .64 • .70
tanks, same basis gal. .43 • —

SD3A, dms., c.l., dlvd. E. of Rockies gal. .58 • —
l.c.l., same basis gal. .63 • .71
tanks, same basis gal. .42 • —

SD23A, dms., c.l., dlvd. E. of Rockies gal. .60½- —
l.c.l., same basis gal. .65½- .71½
tanks, same basis gal. .44½- —

SD23H, dms., c.l., dlvd. E. of Rockies gal. .61 • —
l.c.l., same basis gal. .66 • .72
tanks, same basis gal. .45 • —

SD29, dms., c.l., dlvd. E. of Rockies gal. .59½- —
l.c.l., same basis gal. .64½- .70½
tanks, same basis gal. .43½- —

SD30, dms., c.l., dlvd. E. of Rockies gal. .58 • —
l.c.l., same basis gal. .63 • .69
tanks, same basis gal. .42 • —

SD35A, dms., c.l., dlvd. E. of Rockies gal. .61 • —
l.c.l., same basis gal. .66 • .72
tanks, same basis gal. .45 • —

SD40, dms., c.l., dlvd. E. of Rockies gal. .59 • —
l.c.l., same basis gal. .64 • .70
tanks, same basis gal. .43 • —

West coast dlvd. prices are the same as eastern prices, except in Idaho, Montana, Oregon and Washington, where a 5c. differential on tankcars is maintained.

Diacetone, acetone-free, dms., c.l., dlvd lb. .14½- —
l.c.l., dlvd lb. .15½- —
tanks, dlvd lb. .12 • —
tech., dms., c.l., dlvd lb. .14 • —
l.c.l., dlvd lb. .15 • —
tanks, dlvd lb. .11½- —

Ethyl, 190 pf., USP, tax paid, dms., c.l., dlvd. E. of Rockies gal.20.53 • —
l.c.l., same basis gal.20.58 -20.64
tanks, same basis gal.20.37 • —
tax free, dms., c.l., dlvd. E. of Rockies gal. .58 • —
l.c.l., same basis gal. .63 • .69
tanks, same basis gal. .42 • —
Absolute, 200 pf. tax paid, dms., dlvd. E. of Rockies gal.21.63 • —
l.c.l., same basis gal.21.68 -21.74
tanks, same basis gal.21.47 • —

2 Ethylbutyl, dms., c.l., works lb. .29½- —
l.c.l., works lb. .30 • —
tanks, works lb. .28 • —
2-Ethylhexyl, dms., c.l., dlvd. E. lb. .23¾- —
l.c.l., same basis lb. .24¾- —
tanks, same basis lb. .21¾- —
Furfuryl, cns., works lb. .29 • —
dms., c.l., Cedar Rapids, Ia lb. .21 • —
Newark, N. J lb. .21½- —
l.c.l. Cedar Rapids, Ia lb. .22 • —
Newark, N. J lb. .22½- —
tanks, Memphis, Tenn lb. .184 • —
Hydroabietyl, tech., solid, Zone 1, dms., c.l., dlvd lb. .27 • —
l.c.l., dlvd lb. .27½- —
tanks, dlvd lb. .25 • —
Isoamyl, dms., c.l., works, frt. alld. E lb. .28 • —
l.c.l., same basis lb. .29 • —
tanks, same basis lb. .25 • —
Isobutyl, dms., c.l., dlvd lb. .15 • —
l.c.l., dlvd lb. .16 • —
tanks, dlvd lb. .12½- —
Iso-octyl, dms., c.l., dlvd. E lb. .23½- —
l.c.l., dlvd E lb. .24½- —
tanks, dlvd E lb. .21 • —
Isopropyl, refd., 91%, dms., c.l., dlvd gal. .53 • —
l.c.l., dlvd gal. .60 • —
tanks, dlvd gal. .37 • —
95%, c.l., dlvd gal. .55 • —
l.c.l., dlvd gal. .62 • —
tanks, dlvd gal. .39 • —
99%, dms., c.l., dlvd gal. .57 • —
l.c.l., dlvd. gal. .64 • —
tanks, dlvd gal. .41 • —
Lauryl, bots lb. 2.00 • 2.50
Methyl (see Methanol).
Methylamyl (see Methyl isobutyl carbinol).

Octyl, perfumer's grade, bots lb. 1.75 • 3.25
tech. (see Octanol, normal).
2-Phenylethyl, extra, dms lb. 1.14 • 1.45
standard, dms lb. 1.18 • 1.48
n-Propyl, dms., c.l., dlvd lb. .13 • —
l.c.l., dlvd lb. .14 • —
tanks, dlvd lb. .10½- —
Tetrahydrofurfuryl, dms., c.l. or t.l., f.o.b. Memphis, Tenn lb. .37 • —
l.c.l. or l.t.l., f.o.b. Memphis, Tenn lb. .38 • —
f.o.b. Newark, N. J lb. .40 • —
tanks, dlvd. E. of Denver lb. .365 • —
dlvd. W. of Denver lb. .375 • —
Tridecyl, mixed isomers, dms., dlvd lb. .26½- —
l.c.l., dlvd lb. .27½- —
tanks, dlvd lb. .24 • —
Wood (see Methanol).
Aldol, 95%, dms., works lb. .23 • —
denaturing grade, dms gal. 2.15 • —
Aldrin, tech., fib. dms., c.l., t.l., dlvd lb. .80 • —
l.c.l., dlvd lb. .85 • —
Aletris root, bgs lb. 1.75 • 1.85
Algin (see Sodium alginate).
Alizarine (see 1,2-dihydroxy anthraquinone).
Allethrin, 90%, dms., frt. alld lb.28.80 -28.90
soln., 20%, dms., 200-2,000 lb. lots, frt. alld lb. 6.50 • 6.55
2½%, dms., frt. alld lb. .95 • 1.00
Allspice (see Pimento).
Allyl bromide, chys., works lb. 1.35 • 1.40
Chloride, dms., c.l., dlvd lb. .17 • —
l.c.l., dlvd lb. .18 • —
tanks, dlvd lb. .15 • —
Aloe, Cape, cs lb. .45 • .48
powd., cs lb. .50 • —
Curacao, kgs lb. .50 • .55
Aloin, USP, bbls., dms., kgs lb. 3.75 • 3.82
Alphanaphthol (see a-Naphthol).
Alphanaphthylamine (see a-Naphthylamine).
Alphanitronaphthalene(see a-Nitronaphthalene).
Alphapicoline (see a-Picoline).
Alphaterpineol (see a-Terpineol).
Alphatocopherol (see a-Tocopherol).

Alum, ammonium, gran., bgs., works 100 lbs. 4.30 • —
lump, dms., works 100 lbs. 5.05 • —
powd. dms., works 100 lbs. 5.20 • —
USP, burnt, dms lb. .20 • .21
hydrous, dms lb. .07¾- .08

Alum, potassium, gran., bgs., works 100 lbs. 4.55 • —
lump, dms., works 100 lbs. 5.30 • —
powd., dms., works 100 lbs. 5.45 • —
USP, burnt, dms lb. .20 • .21
hydrous, dms lb. .07¾- .08

Potash-chrome, dms lb. .17 • —
Sodium, dms., c.l., works 100 lbs. 4.60 • —
l.c.l., works 100 lbs. 5.00 • —

Alumina, calcined, bgs., c.l., works lb. .0425- —
l.c.l., works lb. .045 • .0725

Aluminum acetate, basic soln., 24%, bbls., l.c.l., works lb. .14 • —

Chloride, coml., anhyd., dms., c.l., works, frt. equald lb. .15½- —
l.c.l., works, frt. equald. lb. .16 • —
cryst., dms., c.l., works lb. .1450- —
l.c.l., works lb. .1500- —
soln., 32° , cbys., c.l., works lb. .0445- —
l.c.l., works lb. .0520- .1295
tanks, works 100 lbs. 3.45 • —
NF, gran., dms., works lb. .29 • .30

Fluoride, tech., anhyd., bgs., c.l., works lb. .15¾- —
l.c.l., works lb. .16¾- .18¾
Aluminum fluoride in fib. dms. 0.35c. per lb. higher.

Formate, basic soln., dms., c.l., works lb. .12 • —
l.c.l., works lb. .12½- —
Hydrate, heavy, bgs., c.l., frt. equald lb. .0295- —
20,000-40,000 lb. lots, same basis lb. .032 • —
2,000-20,000 lb. lots, same basis lb. .042 • —
bulk, same basis lb. .027 • —
light, bgs., dlvd lb. .18 • —

Aluminum hydroxide, gel., pharmaceutical, 14-15% Al_2O_3, fib. dms., works lb. .22 • —
contract, works lb. .21 • —
9-9½% Al_2O_3, fib. dms., works lb. .19 • —
contract, works lb. .18 • —
dried, USP, XIV, fib. dms., works lb. .82½- —
contract, works lb. .79½- —
tech., powder (see Aluminum hydrate).
Metal, 99%+, ingots, 10,000-lb. lots, frt. alld lb. .2590- —
pigs, 10,000-lb. lots, frt. alld. lb. .2400- —
Oxide, amorphous (see Alumina, calcined).
Paste, lining, extra-fine, dms lb. .66½- —
standard grade, dms lb. .46½- —
Powder, lining, extra, fine, dms. lb. 1.07 • —
standard grade, dms lb. .76½- —

Aluminum powder and paste prices are f.o.b shipping point. Add 1c. per lb. for 100-lb. dm., 1½c. per lb. for 50-lb. dm., 3c. per lb. for 10-lb. can and 5c. to 12c. per lb. for smaller containers. Deduct 1c. per lb. for single shipment of 400 to 1,499 lbs., 2c. for 1,500 to 4,999 lbs., 3c. for 5,000 to 29,999 lbs. and 4c. for 30,000 lbs. or more. Where destination is within the continental U. S. a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs. or over.

Aluminum resinate, precip., 2.1 Al, dms., frt. alld lb. .30½- —
Stearate, dibasic, ctns., c.l. lb. .37 • —
l.c.l. lb. .38 • .42
monobasic, ctns., c.l. lb. .37 • —
l.c.l. lb. .38 • .42
tribasic, ctns., c.l. lb. .37 • —
l.c.l. lb. .38 • .42
Sulfate, coml., bulk, c.l., works 100 lbs 1.85 • —
grd., bgs., c.l., works ton 37.00 • —
lump, bgs., c.l., works ton 40.00 • —
Iron-free, bgs., c.l., works, frt. equald 100 lbs 3.55 • —
l.c.l., works, frt. equald. 100 lbs 3.95 • —
Prices $1 per ton higher in the south.
USP, gran., dms., works lb. .16 • .18
powd., dms., works lb. .36 • .37
Trihydrate, heavy (see Aluminum hydrate, heavy).
Ambergris, gray, bots oz. 8.00 -10.00
Aminoazotoluene base, bbls., 100% basis lb. 1.03 • 1.18
Aminoethyl ethanolamine, dms., c.l., dlvd lb. .46½- —
l.c.l., dlvd lb. .45 • —
tanks, dlvd lb. .45 • —
2-Amino-2-methyl-1-propanol, dms., c.l., frt. alld lb. .44 • —
l.c.l., frt. alld lb. .45 • —
tanks, frt. alld lb. .42 • —
m-Aminophenol, dist., dms., ton lots. lb 2.05 • —
smaller lots lb 2.50 • —
p-Aminophenol, dms., frt. alld lb. 1.13 • —

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Now even Better

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by the world's largest producer of synthetic detergent raw materials

Oronite's continuous multi-million dollar research and product development program scores again with Alkane '56, embodying still further improvements in the leading detergent raw material. Better than ever Alkane '56 may be sulfonated by any conventional method—products derived from it have an even lighter color, less odor—with a very minimum oil content.

If you are considering sulfonation, it will pay you to check with Oronite. We have the experience, plus engineering and manufacturing specialists to accurately estimate your complete needs for sulfonation. Plant designs, equipment needs and prices, performance data, yields—everything you need to know.

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Other Oronite Detergent Products
Detergent Slurry
Detergent D-40
Detergent D-60
Dispersant NI-W
Dispersant NI-O
Dispersant NI-E
Wetting Agent "S"

ORONITE CHEMICAL COMPANY
EXECUTIVE OFFICES: 200 Bush Street, San Francisco 20, California
SALES OFFICES
450 Mission Street, San Francisco 5, Calif. — 714 W. Olympic Blvd., Los Angeles 15, Calif.
30 Rockefeller Plaza, New York 20, N. Y. — 20 North Wacker Drive, Chicago 6, Illinois
Carew Tower, Cincinnati 2, Ohio — Mercantile Securities Bldg., Dallas 1, Texas
36 Avenue William-Favre, Geneva, Switzerland

ORONITE CHEMICAL COMPANY

Aminophylline, USP 100-lb dms lb 3.55 - —
Ammonia anhyd fertilizer tanks, works, frt. equald ton 85.00 - —
refrigeration tanks works, frt equald ton 87.50 - —
aqueous (29.4% NH3) dms. c.l. dlvd Metropolitan area 100 lbs .4.60 - —
t.c.l. works 100 lbs 4.00 - —
tanks works, anhyd basis ton 88.00 —
Ammoniacal liquor (see Ammonia, aqueous).
Ammoniac, sal, gray, bgs., c.l., works frt equald 100 lbs 8.25 —
t.c.l. same basis 100 lbs 8.65 11.15
white gran (see Ammonium chloride tech.).
Ammonium acetate, purif., dms lb. .38 - —
Benzoate USP dms, kgs. 4,000-lb. lots frt alld lb. .80 - —
smaller lots frt alld lb. .81 - 1.08
Biborate gran., dms. c.l., works ton 319.50 - —
ton lots, ex whse ton 395.00 - —
smaller lots, ex whse ton 400.00 - —
Bicarbonate dom., dms., c.l., works 100 lbs. 6.50 - —
t.c.l. works 100 lbs. 8.00 - —
imp. dms t.c.l. lb. .07¼ - .08½
Bichromate, dms., works lb. .42 - .43
Bifluoride, dms., dlvd lb. .2145 - .2245
Bromide, NF, gran., bbls lb. .40 - —
Powdered ammonium bromide 10c per lb. higher.
Carbonate, USP, lump, dms lb. .16 - —
Chloride, tech., fine gran., bgs., c.l., works 100 lbs. 5.25 - —
t.c.l., works 100 lbs. 7.00 - —
USP, gran., bbls., dms lb. .17¼ - —

Ammonium citrate, dibasic, bbls lb. .77 - —
Dichromate (see Ammonium bichromate).
Fluoride (see Ammonium bifluoride).
Hydroxide (see Ammonia accueous).
Hypophosphite, NF, dms lb. 3.07 - —
Iodide, NF, dms., bots lb. 4.26 - 4.38
Linoleate, 80%, dms., works lb. .50 - .55
Nitrate dom. fertilizer grade, 33.5% N., bgs., western works frt equald ton 68.00 - —
with dolomite, 20.5%N bgs., Hopewell, Va ton 51.00 - —
imp. Canadian, 33.5% N., eastern bgs., c.l., ship't point, frt equald to $3 per ton. ton 70.00 - —
western, bgs., c.l., f.o.b. cars, Los Angeles ton 79.76 - —
Oxalate, fine gran., dms lb. .26½ - .31
Pentaborate, gran., bgs., c.l., works ton lots, ex whse ton 187.50 - —
ton lots, ex whse ton 271.50 - —
smaller lots, ex whse ton 276.50 - —
Ammonium pentaborate powder $10 per ton higher.
Persulfate, kgs lb. .38 - 47½
Phosphate, comil., bgs., c.l., works, frt. equald lb. .09 - —
t.c.l., same basis lb. .0935 - —
dibasic, NF, V bbls., dms. lb. .46 - —
tech., bgs., c.l., works, frt. equald lb. .09 - —
t.c.l., same basis lb. .0935 - —
Salicylate, NF, dms., kgs lb. 1.62 1.64
Silicofluoride, dms., works lb. .11¾ - .13¼

Ammonium sulfamate, bgs., c.l., t.l., works lb. .18 - —
l.c.l., works lb. .22 - —
Sulfate, coke-oven, bulk, producing ovens, base price ton 32.00 - —
syn., bulk, c.l., f.o.b. works ton 32.00 - 42.00
purif., dms., works lb. .09 - .09½
Sulfide, liq., 40-44%, tanks, frt. equald., 100% basis ton 160.00 - —
Sulfocyanide, tech (see Ammonium thiocyanate).
Thiocyanate, tech., dms., c.l., works lb. .20 - —
t.c.l. works lb. .22 - .26
Thioglycollate, comil., chys., 100% basis lb. 1.35 - 1.55
highly purif., chys. 100% basis, lb. 1.70 - 1.96
Thiosulfate, cryst., photo grade, 6b. dms., frt. alld lb. .65 - —
60% soln., dms., c.l., works lb. .06½ - —
d Amphetamine hydrochloride dibasic, bots lb. 28.00 - —
dl, dms lb. 6.00 - —
d-monobasic, bots lb. 28.00 - —
d-Phosphate, dibasic, bots lb. 28.00 - —
dl, dms lb. 6.00 - —
d-Sulfate, dms lb. 28.00 - —
dl, dms lb. 6.00 - —
Amyl acetate, ex fusel oil, tech., dms., c.l., frt. alld, E. of Rockies lb. .18 - —
l.c.l., same basis lb. .19 - —
tanks, same basis lb. 15½ - —
syn., oxo process, dms., c.l., dlvd lb. .19¼ - —
l.c.l., dlvd lb. .20¼ - —
tanks, dlvd lb. .17¼ - —
ex pentane, reg., dms., c.l., dlvd lb. .18 - —
l.c.l., dlvd lb. .19 - —
tanks, dlvd lb. .15½ - —
tech., dms., c.l., dlvd lb. .16 - —
l.c.l., dlvd lb. .17 - —
tanks, dlvd lb. .13½ - —

Amyl alcohol (see Alcohol, amyl).
n-Butyrate, dms lb. .90 - 1.25
Cinnamic, aldehyde, dms lb. 1.75 - 2.20
Nitrite, USP, bots lb. 1.75 - 1.83
Salicylate, cns., dms lb. .74 - 1.05
o-tert-Amyl phenol, dms., c.l., works, lb. .48 - —
l.c.l., works lb. .49 - —
tanks, works lb. .46 - —
p-tert-Amyl phenol, dms., c.l., works, lb. .25¾ - —
l.c.l., works lb. .26¾ - —
tanks, works lb. .24¾ - —
Anethole, NF, cns., dms lb. 1.85 - —
tech., dms lb. 1.10 - 1.15
Angelica root, dom., bls lb. .60 - .70
Aniline oil, dms., c.l., frt. alld lb. .21 - —
l.c.l., frt. alld lb. .22 - —
tanks, frt. alld lb. .20 - —
tankwagons, min. 2,000 gals. lb. .20½ - —
Salt, dms., c.l., truckloads, 20,000 lbs., min., frt. alld lb. .31 - —
l.c.l. same basis lb. .33 - —
Anise seed, Mexican, bgs lb. .29 - .30
Spanish, bgs. lb. .28 - .29
Anisic aldehyde, bots., dms lb. 1.80 - 2.70
o-Anisidine, dms., c.l., frt. alld lb. .87 - —
l.c.l., same basis lb. .88 - —
tanks, same basis lb. .86 - —
p-Anisidine, dms., works lb. .97 - —
Annatto seed, whole, bgs lb. .15 - .17
Anthracene, 90-95% bbls., ton-lots, works lb. .83 - —
smaller lots, works lb. .95 - —
Anthraquinone, 99.5%, bbls, c.l., frt. alld lb. .83 - —
l.c.l., same basis lb. .86 - —
electrical grade, bbls., l.c.l., same basis lb. .91 - —
Antimony butter (see Antimony trichloride).
Metal, bulk, c.l., mines lb. .33 - —
cs., c.l., mines lb. .33½ - —
Oxide, bgs., c.l., frt. alld lb. .27 - —
l.c.l., frt. alld lb. .28½ - —
Sulfide, approx. 65%, bgs., dlvd lb. .23 - .26
Trichloride, anhyd., solid, pails, c.l., works lb. .41 - —
l.c.l., works lb .43 - —
Antimony-potassium tartrate, tech., powd., dms lb. .65½ - .70½
USP, powd., dms lb. .70½ - .71½
Antipyrine, NF, 200-lb. bbls lb. 3.50 - —
Apomorphine hydrochloride, USP, 5 oz. lots, bots oz. 35.60 - —
Areca nuts, powd., bbls lb. .15 - .16
Arecoline hydrobromide, NF, bots., tins oz. 4.50 - 6.00
l-Arginine monohydrochloride, dms, 1 kilo lots kilo. 74.80 - —
Arnica flowers (true montana), bls. lb. No prices.
Arsenic metal, lump, bbls. ex whse. lb. .54 - —
Trioxide, USP, dms lb. .48 - —
White, powd., bbls., c.l., dlvd lb. .05½ - —
l.c.l., dlvd lb. .06½ - .07¼
Asafetida, cs lb. .36 - .39
powd., bbls., dms lb. .50 - .63
Ashestine (see Talc, fiorous, N. Y.)
Asbestos, Canadian, crude, No. 1, c.l. (20 tons), mines ton 1,430.00 - —
No. 2, c.l. (20 tons), mines ton 742.50 - —
Run-of-mine, c.l. (20 tons) mines ton 611.60 - —
3K, c.l. (20 tons), mines ton 479.60 - —
3R, c.l., (20 tons), mines ton 408.10 - —
3T, c.l. (20 tons), mines ton 382.80 - —
3Z, c.l. (20 tons), mines ton 353.10 - —
4K, c.l. (20 tons), mines ton 190.30 - —
4M, c.l. (20 tons), mines ton 190.30 - —
4T, c.l. (20 tons), mines ton 171.60 - —
4Z, c.l. (20 tons), mines ton 171.60 - —
5D, c.l. (20 tons), mines ton 134.75 - —
5K, c.l. (20 tons), mines ton 134.75 - —
5M, c.l. (20 tons), mines ton 122.35 - —
5R, c.l. (20 tons), mines ton 115.50 - —
6D, c.l. (30 tons), mines ton 81.90 - —
7D, c.l. (30 tons), mines ton 71.92 - —
7F, c.l. (30 tons), mines ton 68.25 - —
7H, c.l. (30 tons), mines ton 57.75 - —
7K, c.l. (30 tons), mines ton 48.30 - —
7M, c.l. (30 tons), mines ton 42.00 - —
7R, c.l. (30 tons), mines ton 40.95 - —
7RF, c.l. (30 tons), mines ton 42.00 - —
7T, c.l. (30 tons), mines ton 38.85 - —
7TF, c.l. (30 tons), mines ton 42.00 - —
8S, c.l. (30 tons), mines ton 28.35 - —
Asbestos c.l. prices are in U. S. funds, l.c.l. lots $4 per ton higher.
Asphalt, gilsonite, black jet, bgs., c.l., mines ton 37.00 - —
select, 350° F. fusing pt., bgs., c.l., mines ton 38.00 - —
270°-295°F., fusing pt., bgs., c.l., mines ton 37.00 - —
seconds, 300°-390°F. fusing pt., bgs., c.l., mines ton 32.00 - —
Manjak, No. 10, crude, dms., works lb. .06¼ - —
Petroleum, cut-back, tanks, tankwagon, refy gal. .09 - —
emulsion, tanks, tankwagon, refy. gal. .09½ - —
steam-refd., 50-80 penetration, tanks, tankwagon, refy ton 21.00 - —
85-300 penetration, tanks, tankwagon, refy ton 20.00 - —
Aspirin, (see Acid acetylsalicylic).
Atropine, USP, bots oz. 3.90 - —
Sulfate, USP, bots oz. 2.45 - 2.65

B

Bacitracin, bulk, 1,000,000,000 or more units 50,000 units. .70 - —
less than 1,000,000,000 units. 50,000 units. .75 - —
Balm of Gilead buds, dried, bgs lb. 1.35 - 1.45
Barberry root bark, bgs lb. .28 - .30
Barbital, USP, 100-lb. dms lb. 4.50 - —
Sodium, USP, dms lb. 4.75 - 4.77
Barium carbonate, precip., bgs., c.l., works ton 100.00 - —
smaller lots, works ton 110.00 - —
Chlorate, kgs., works lb. .32 - .36
Chloride anhyd., bgs., c.l., works, ton 165.00 - —
l.c.l., works ton 175.00 - —
NF, cryst., dms lb. .20 - —
tech., cryst., dms., c.l., works, 100 lbs. 6.50 - —
l.c.l., works 100 lbs. 7.00 - —
Chromate, bgs., frt. equald lb. .35 - —
Dioxide (see Barium peroxide).
Hydrate, cryst., bgs., c.l., t.l., frt. equald ton 200.00 - —
l.c.l., l.t.l., frt. equald ton 210.00 - —
Monoxide (see Oxide).
Nitrate, bbls., c.l., t.l., dlvd lb. .16 - —
l.c.l., l.t.l., dlvd lb. .17 - —
Oxide, grd., dms., c.l., t.l., frt. equald ton 275.00 - —
l.c.l., l.t.l., frt. equald ton 285.00 - —
Peroxide, dms., frt. equald lb. .20 - —
Stearate, ctns., c.l., frt. alld lb. .39 - —
l.c.l., same basis lb. .40 - .44
Sulfate, tech. (see Barytes and blanc fixe). .
X-ray, ums lb. .15 - .15¼
Sulfide, dms., c.l., works ton 85.00 - —
l.c.l., works ton 95.00 - —

20° and 22° Baumé Water White and Commercial Grades Available in Tank Car Quantities from Niagara Falls, New York

20° Baumé Commercial Grade Muriatic Acid is also available for prompt tank car shipments from Carlsbad, New Mexico.

specifications

20° and 22° Baumé Water White Grade

COLOR.....WATER WHITE
IRON.....0.0001% MAXIMUM
FREE CHLORINE.....NONE
ARSENIC.....NONE
INORGANIC SALTS.0.002% MAXIMUM
SULFATES.....0.0003% MAXIMUM
ORGANIC MATTER 0.0002% MAXIMUM
SUSPENDED MATTER.....NONE

MURIATIC ACID

International's Muriatic Acid is produced from inorganic materials and, at the Niagara Falls Plant, is made directly by burning hydrogen with chlorine. You can be sure of the purity, quality and consistency of grade to specifications. Muriatic Acid, in the grade and quantity you require, is available for prompt shipments. We shall be glad to send samples on request.

International Minerals Chemicals

MINING·REFINING·MANUFACTURING CAUSTIC POTASH—*all standard grades;* CARBONATE OF POTASH—*all standard grades;* POTASSIUM CHLORIDE—*refined and technical grades;* SULFATE OF POTASH; LIQUID CHLORINE; MURIATIC ACID.

INTERNATIONAL MINERALS & CHEMICAL CORPORATION

Address all inquiries to Industrial Sales Dept., Potash Division
General Offices: 20 North Wacker Drive, Chicago 6
61 Broadway, New York 6 • Midland, Texas

Barytes, Southern, off-color, bgs., mines ton 25.00 - —
95-75%, bgs., mines ton 25.00 - —
water-grd., paper bgs., c.l., E. St. Louis ton 45.00 - —
ex-whse, N. Y. ton 65.10 - —
Bauxite, bulk, mines ton. 6.75 -10 00
Bay leaves (see Laurel leaves).
Belladonna leaf, bls lb. .35 - .37
root, bls lb. .45 - .50
Bentonite, dom., 200 mesh, bgs., c.l., mines ton 14.00 - —
imp. Italian, white, high gel., bgs., 5-ton lots, ex whse ton 80.60 - —
1 ton-lots, ex whse ton 83.10 - —
low gel., bgs., 5-ton lots, ex whse ton 78.95 - —
1-ton lots, ex whse ton 81.45 - —
Benzal chloride, cbys., works lb. .44 - —
Benzaldehyde, NF, dms lb. .74 - 1.05
tech., cbys., t.l., dms lb. .43 - —
smaller lots lb. .44 - —
Benzene (See Benzol).
Hexachloride, 25% and 99% gamma isomer (see Lindane)
tech., high gamma, dms., c.l., dlvd., gamma unit-lb. .0075- .008
l.c.l., works, gamma unit-lb. .009 - .0095
low gamma, dms., c.l., dlvd., gamma unit-lb. .0075- —
l.c.l., works, gamma unit-lb. .009 - —
Benzidine hydrochloride, bbls., c.l., frt. alld., 100% basis lb. 1.03 - —
l.c.l., same basis lb. 1.05 - —
Sulfate, tech., frt. alld, 100% basis lb. 1.05 - —
Benzocaine, dms. lb. 3.48 - 3.50
Benzol, coaltar, pure or nitration, tanks, works:—
Bethlehem, Pa gal. .36 - —
Birmingham district gal. .36 - —
Chicago district gal. .36 - —
Cleveland district gal. .36 - —
Geneva, Utah gal. .36 - —
Johnstown, Pa. gal. .36 - —
Lackawanna, N. Y. gal. .36 - —
Lone Star, Texas gal. .36 - —
Lorain, Ohio gal. .36 - —
Middletown, Ohio gal. .36 - —
Minnequa, Colo gal. .36 - —
Philadelphia district gal. .36 - —
Pittsburgh district gal. .36 - —
Sparrows Point, Md. gal. .36 - —
Syracuse, N. Y. gal. .36 - —
Terre Haute, Ind. gal. .36 - —
Youngstown, Ohio gal. .36 - —
Benzophenone, dms. lb. 1.40 - 1.70
Benzotriazole, tech., dms., 1,000-lb. lots, works lb. 2.25 - —
Benzotrichloride, cbys., 1,000-lb. lots or more, frt. equald. lb. .18 - —
smaller lots, frt. equald. lb. .20 - —
Benzoyl chloride, cbys., dms., c.l., works, frt. equald lb. .22 - —
l.c.l., same basis lb. .23 - —
tank trucks, dlvd. Metropolitan area lb. .21 - —
Peroxide, purit., fib. dms., 50 to 1,000-lb. lots, works lb. .98 - 1.08
Benzyl acetate, f.f.c. cns. dms lb. .62 - 1.04
Alcohol (see Alcohol, benzyl).
Benzoate, USP f.f.c. cns., dms lb. .62 - 1.10
Chloride, tech., 1%-gal. cbys., dms., c.l., works, frt. equald. lb. .23 - —
l.c.l., same basis lb. .24 - —
tank, trucks, dlvd. Metropolitan area lb. .21 - —
A 2½c. differential is quoted on benzyl chloride in 5-gal. cbys. In steel dms. prices were ½c. lower.
Cinnamate, cns lb. 3.60 - 3.90
Dimethylamine, 55-gal. dms., lots, works lb. 2.25 - —
Formate, cns. lb. 1.30 - 2.10
Isoeugenol, cns. lb. 8.60 - 9.10
Propionate, bots. lb. 1.35 - 1.65
Salicylate, bots lb. 1.50 - 1.85
Benzylidine acetone, bots lb. 1.68 - 1.80
Chloride (see Benzal chloride).
Berberine bisulfate, cns lb. 35.00 -36 25
Hydrochloride, bots. lb. 35.00 -36.25
Betagammapicoline (see b-g-Picoline).
Betamethylnaphthalene (see b-Methylnaphthalene)
Betanaphthol (see b-Naphthol).
Betanaphthylamine (see b-Naphthylamine).
Betaphenylethylamine (see b-Phenylethylamine).
BHC (see Benzene hexachloride, technical)
Biotin cryst., bots gram 10.00 - —
Biphenyl (see Diphenyl).
Bismuth chloride, jars lb. 5.11 - —
Hydroxide, dms. lb. 4.65 - —
Metal, bxs., ton lots lb. 2.25 - —
Nitrate, cryst., dms lb. 2.10 - 2.17
Oxide, anhyd., dms lb. 4.47 - 5.05
Oxychloride, dms lb. 4.37 - 4.42
Phenolsulfonate, fib. dms lb. 5.22 - —
Subcarbonate, USP, dms lb. 3.20 - —
Subgallate, NF, fib. dms lb. 3.15 - —
Subiodide, fib. dms lb. 5.37 - —
Subnitrate, NF, dms lb. 2.65 - —
Subsalicylate, USP, dms lb. 3.50 - —
Bismuth-ammonium citrate, USP, powd., jars lb. 4.22 - —
Black, acetylene, imp., bgs., c.l., duty and freight extra lb. .17 - —
cs., l.c.l., ex whse lb. .22½ - .26
Ash (see Barium sulfide).
Bone, dms., l.c.l., frt. alld lb. .17 - .23¼
Pacific coast bone black prices 2c. per lb. higher.
Carbon, channel, pigment, high color, beads, ctns., c.l., works, lb. .72 - —
l.c.l., dlvd. or whse. lb. .78 - —
medium color, uncompressed, bgs., c.l., works, lb. .12 - —
l.c.l., dlvd. or whse, lb. .19 - —
rubber, beads, bulk, c.l., works lb. .07 - —
bgs., c.l., works lb. .074 - —
l.c.l., works lb. .1225- —
furnace, fast extruding, bgs., c.l., works lb. .06 - —
ctns., l.c.l., whse lb. .10 - —
high abrasion, bulk, c.l., works, lb. .0750- —
bgs., c.l., works lb. .0790- —
l.c.l., dlvd. or whse lb. .122 - .125
high modulus, bgs., c.l., works, lb. .0550- —
ctns., l.c.l., whse lb. .0950- —
semi-reinforcing bgs., c.l., works lb. .045 - —
bgs., ctns., l.c.l., whse lb. .085 - —
Charcoal (see C).
Dyes (see Dyes).
Graphite (see G).
Iron oxide, pure, bgs., c.l., works, lb. .13¼ - —
l.c.l., works lb. .13½ - —
Lamp, bgs., c.l., works lb. .16 - .45
Mineral, bgs., works lb. .0160- .0675
Blackberry root bark, bls lb. .45 - —
Black haw root bark, bls lb. .63 - .65
tree bark, bls. lb. .40 - .45

Blanc fixe, dry, byproduct, bgs., c.l., works ton 190.00 - —
l.c.l., works ton 200.00 - —
direct process, bgs., c.l., works. ton 110.00 - —
l.c.l., works ton 120.00 - —
N. Y. whse ton 155.00 - —
Blood, dried, 16-16½% ammonia, bgs unit-ton. 4.75 - —
high-grade, unground, 16-17% ammonia, bgs., Chicago, unit-ton. 5.25 - —
soluble, bgs., c.l. lb. .13 - .15
l.c.l. lb. .15½ - .19½
Bloodroot, bls lb .48 - .50
Blue, alkali, dry, 250-lb. bbls., dlvd. N. of Tenn. and N. C., E. of Miss. R. including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis lb. 2.10 - —
toner, 125-lb. bbls., litho flushed, same basis lb. 1.20 - —
Chinese, bbls., c.l., same basis lb. .50 - —
l.c.l., ton lots, same basis lb. .51 - —
smaller lots, same basis lb. .52 - —
Cobalt, genuine, bbls., same basis. lb. 4.90 - —
Imitation (see Blue, ultramarine).
Dyes (see Dyes).
Iron (see Blue, Chinese Milori, Potash, Prussian and Soda).
Methyl, violet toner, molybdated, PMA, bbls., same basis lb. 2.75 - —
tungstated, PTMA, bbls., same basis lb. 4.00 - 4.15
Milori, bbls., c.l., same basis lb. .50 - —
l.c.l., ton lots, same basis lb. .51 - —
smaller lots, same basis lb. .52 - —
Peacock, fugitive, 100% color strength, bbls., same basis. lb. .85 - —

Blue, phthalocyanide, full strength, bbls., same basis lb. 3.45 - —
resinated, bbls., same basis lb. 3.00 - —
water dispersable, bbls., same basis lb. 1.54 - —
Potash, CP, bbls., same basis lb. .56 - —
Potash, CP, bbls., same basis lb. .56 - —
Prussian, insoluble, soluble, bbls., c.l., same basis lb. .50 - —
l.c.l., ton lots, same basis lb. .51 - —
smaller lots, same basis lb. .52 - —
Soda, CP, bronze, bbls., c.l., same basis lb. .50 - —
l.c.l., ton lots, same basis lb. .51 - —
smaller lots, same basis lb. .52 - —
Ultramarine, cobalt type, dry or pulp, bbls., same basis lb. .30¼ - .35
jobbing types, bbls., same basis, lb. .19 - —
regular types, dry, bbls., same basis lb. .22½ - .35
Victoria toner, molybdated, PMA, bbls lb. 4.10 - —
tungstated, PTMA, bbls lb. 5.35 - —
Blue dry colors, dlvd. prices ½c. higher Ala., Fla., Ga., La. (Shreveport 1½c.), Miss., N. C., S. C., Tenn., Tex. (El Paso 2c), Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph 1.6c. higher. Pac. Coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equalized with Chicago.
Vitriol (see Copper sulfate).
Bluestone (see Copper sulfate).
Bonemeal, steamed, works, E. Los Angeles ton 60.00 - —
ton 82.00 - —

Bone phosphate defluorinated (see D) of lime (see Calcium phosphate, tribasic).
precipitated (see Calcium phosphate tribasic, NF, precip.)
Borax, tech., anhyd., 99½%, bgs., c.l., works ton 80.50 - —
ton lots, ex whse., N. Y. or Chicago ton 130.25 - —
bulk, c.l., works ton 71.50 - —
cryst., 99½%, bgs., c.l., works. ton 69.25 - —
ton lots, ex-whse., N. Y. or Chi ton 119.00 - —
smaller lots, same basis. ton 124.00 - —
gran., decahydrate, 99½%, bgs., c.l., works ton 43.25 - —
ton lots, ex whse., N. Y., Chi ton 93.00 - —
smaller lots, same basis. ton 98.00 - —
bulk, c.l., works ton 36.75 - —
pentahydrate, 99½%, bgs., c.l., works ton 57.75 - —
ton lots, ex whse., N.Y., Chi ton 107.50 - —
smaller lots, same basis. ton 112.50 - —
bulk, c.l., works ton 51.50 - —
powd., 99½%, bgs., c.l., works. ton 48.25 - —
ton lots, ex-whse., N. Y. or Chi ton 98.00 - —
smaller lots, same basis. ton 103.00 - —
Borax packed in kgs., $45.50 per ton higher than in paper bgs.; in barrels, $24.50 higher. USP borax $15 per ton higher.

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for chemical processing

Hydrobromic Acid

A NEW, MODERN PLANT with new exacting controls and increased capacity is now producing Hydrobromic Acid at Michigan Chemical Corporation. Greater demand for this product as a brominating agent and for the manufacture of other bromides made this expansion necessary.

Why use HBr? Because bromide intermediates, made with Hydrobromic Acid, often provide a higher yield of finished products and more economical production.

USES: Bromides, intermediates, dyes, drugs, perfumes, sedatives, photographic emulsions.

Michigan Chemical Corporation, for almost twenty years a quality producer of chemicals, offers a series of pure bromides, among them being Ethyl Bromide, Monobromobenzene, Cyclopentyl Bromide and Hydrobromic Acid, specially made for use in pharmaceutical manufacturing. Write for further information or catalog.

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MICHIGAN CHEMICAL CORPORATION Saint Louis, Michigan

EASTERN SALES OFFICE: 230 Park Avenue New York 17, New York

BASIC MANUFACTURER OF INDUSTRIAL, PHARMACEUTICAL AND AGRICULTURAL CHEMICALS

Bordeaux Mixture—Carotene

Bordeaux mixture, bgs., c.l., works, frt. alld. or nearest whse, pt. lb. .18 - .24
l.c.l., same basis lb. .19 - .26
Borneol, cns lb. 2.50 - 4.50
Boron trifluoride gas, cyls., truckload, works lb. .62 - —
t.l.l., works lb. .70 - —
Brazilwood extract (see Hypernic extract).
Brimstone (see Sulfur).
Bromine, purif., cs., c.l., t.l., dlvd. E. of Rockies lb. .31 - —
l.c.l., same basis lb. .33 - .38
ret. dms., c.l., t.l., dlvd. E. of Rockies lb. .30 - —
l.c.l., same basis lb. .30 - .32
tanks, same basis lb. .21½- —
Bromochloromethane, dms., c.l., frt. equald lb. .48 - —
l.c.l., same basis lb. .50 - —
Bromoform, pharmaceutical grade, bots lb. 1.62 - 2.60
cbys. lb. 1.52 - —
Bromstyrol, bots lb. 5.40 - 5.70
Bronze powder aluminum (see A).
Brown, iron oxide, pure bgs., c.l., works lb. .14¼- —
l.c.l., works lb. .14½- —
Oxide, metallic, bgs., works lb. .04 - —
Sienna, burnt., paper bgs., c.l., works lb. .06¼- .17¼
l.c.l., works lb. .06½ .17½
raw, paper bgs., c.l., works lb. .06¼- .16¼
l.c.l., works lb. .06½- .16½
Brown, umber, burnt, American, c.l., works lb. .07 - .07¾
l.c.l., works lb. .07¼- .08
Turkey type, bgs., c.l., Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N. Y. lb. .07¾- —
raw, American, bgs., works lb. .07½- .08¼
Turkey-type, bgs., works lb. .06¾- .07
Vandyke, bbls., works lb. .09½- .12
Brucine, cns., 100-oz. lots oz. .20 - .25
Sulfate, NF cns., 100-oz. lots oz. .15 - .20
Buchu leaves, bls lb. .85 - —
Butadiene, refd., cyls., c.l. refy lb. .21 - —
l.c.l., refy. lb. .22 - —
tanks, refy lb. .15 - —
Butane, indust., tanks, group 3 gal. .04½- —
N. Y harbor gal. .08 - —
n-Butyl acetate, ferment., dms., c.l., frt. alld lb. .16 - —
l.c.l., same basis lb. .17 - —
tanks, same basis lb. .13½- —
syn., dms., c.l., dlvd. E. lb. .16 - —
l.c.l., same basis lb. .17 - —
tanks, same basis lb. .13½- —
sec-Butyl acetate, syn., dms., c.l., dlvd. E lb. .13 - —
l.c.l., same basis lb. .13¾- —
tanks, same basis lb. .11¼- —
Butyl alcohol (see Alcohol, n-Butyl).
Aldehyde (see Butyraldehyde).
Chloride, dms., c.l., works lb. .37½- —
l.c.l., works lb. .38 - —
Ether, dms., c.l., works lb. .32¾- —
l.c.l., works lb. .33¼- —
tanks, works lb. .31 - —
Butyl lactate, dms., c.l., frt. alld. E. of Rockies lb. .42½- —
l.c.l., same basis lb. .43½- —
tanks, same basis lb. .40 - —
Laurate, dms., works lb. .39 - —
Methacrylate, dms., c.l., t.l., works, lb. .55 - —
l.c.l., works lb. .55½- —
Oleate, refd., dms., l.c.l., works lb. .32 - —
Phenylacetate, dms. lb. 4.50 - 4.60
Phthalate (see Dibutyl phthalate).
Stearate, dms., c.l., frt. equald, lb. .25 - —
l.c.l., same basis lb. .26 - —
Butylamine (see mono-, di- and tri-).
6-tert-Butyl-m-cresol, dms., c.l., works lb. .55 - —
l.c.l., works lb. .56 - —
tanks, works lb. .54 - —
p-tert-Butylphenol, bgs., c.l., works, lb. .25½- —
Butyraldehyde, dms., c.l., dlvd. lb. .21½- —
l.c.l. dlvd. lb. .22½- —
tanks, dlvd lb. 19½ —
Butyric ether (see Ethyl butyrate).

C

Cacao butter (see Cocoa butter).
Cadmium iodide, 25-lb. fib. dms lb. 6.75 - 7.00
Metal ingots or sticks, cs., dlvd. lb. 1.70 - —
Caffeine, USP, nat., cryst., anhyd., dms., 100-lb. lots or more lb. 3.00 - —
hydrous, dms., 100-lb. lots or more lb. 2.80 - —
syn., cryst., anhyd., dms., 100-lb. lots or more lb. 3.00 - —
hydrous, 100-lb. lots or more lb. 2.80 - —
Citrated, USP, dms., 100-lb. lots or more lb. 2.70 - —
Calamine, USP, dms lb. .34 - —
Calciferol, cryst., vials, 1-kilo lots, works gram. .60 - —
25 to 100 gram lots, works, gram. .65 - —
in edible oil (see Viosterol).
Calcium p-aminosalicylate, fib., dms., 1,000 lb. lots, frt. adjusted lb. 7.00 - —
smaller lots, same basis lb. 7.05 - 7.50
Arsenate, dealers, bgs., c.l., frt. alld. lb. .09 - .09¼
l.c.l., same basis lb. .10 - .10½
Bromide, NF, jars lb. .94 - .98
Carbide, standard generator size, dms., c.l., dlvd ton. 134.40 - —
Carbonate, nat., dry-grd., air floated, 325 mesh, bgs., c.l., works ton. 10.50 - —
chalk, whiting, 325 mesh, bgs., works ton. 32.00 -34.00
water-grd., ½ to 10 microns, bgs., c.l., works ton. 30.00 - —
10 to 20 microns, bgs., c.l., works ton. 17.00 -18.00
precip., dense, bgs., c.l., works, ton. 32.50 - —
l.c.l., works ton. 42.50 - —
medium, bgs., c.l., works ton. 38.00 - —
l.c.l., works ton. 48.00 - —
surface treated, bgs., c.l., works ton. 37.50 - —
l.c.l., works ton. 47.50 - —
ultrafine, bgs., c.l., works, ton. 110.00 -160.00
l.c.l., works ton. 120.00 -175.00
Chloride, cryst., purif., dms lb. .27 - —
flake, 77-80%, paper bgs., c.l., works, frt. equald ton. 29.00 - —
liquor, 40%, tanks, frt. equald, ton. 12.35 - —
pellets bgs., c.l., works ton. 35.40 - —
powd., bgs., c.l., works ton. 35.00 - —
solid, 73-75%, dms., c.l., frt. equald ton. 27.50 - —
l.c.l., works, same basis, ton. 34.00 -71.00
USP, gran., dms. lb. .32 - —
Chromate bgs., frt. equald lb. 29½- .30
Cyanide, dms., dlvd. E. of Rockies lb. .24 - .50
Cyclamate, 100-lb. fib. dms lb. 2.95 - —
Gluconate, AA, bbls., dms lb. .74 - .76
USP, bbls., dms lb. 67 - .69
Hydride, dms., works lb. 2.15 - 3.00
Hypochlorite, high test, 45-lb. cs., dlvd. E. of Rockies cs. 22.60 -24.75
100-lb. dms., same basis dm. 28.65 -32.50
frt. equald 100 lbs. 8.25 - —
l.c.l., frt. equald 100 lbs. 9.00 - —
Hypophosphite, dms., ton lots or less lb. .90 - .93
Iodide, jars lb. 4.52 - —
Lactate, NF, dms., 10,000-lb. lots or more, works lb. .36 - .40
smaller lots, works lb. .41 - .48
Mandelate, USP, dms., works lb. 2.10 - 2.25
Naphthenate liq., 4% Ca., dms., frt. equald lb. .27¼- —
Nitrate, fertilizer grade, bgs., c.l., Los Angeles ton. 46.00 - —
tech., 5 dm., works lb. .13 - —
Pantothenate, dms., bots., frt. adjusted gram. .045 - —
Para-aminosalicylate (see Calcium p-Aminosalicylate).
Phenolsulfonate, dms lb. .70 - —
Phosphate, dibasic, USP, bgs., c.l., frt. equald 100 lbs. 7.75 - —
l.c.l., frt. equald 100 lbs. 8.50 - —
feed grade, 18½%P, bgs., c.l., t.l., frt. equald ton. 79.55 -83.25
l.c.l., frt. equald ton. 88.25 -93.25
21% P, bgs., c.l., t.l., frt. equald ton. 94.50 - —
l.c.l., frt. equald ton. 99.50 -104.50
monobasic, bgs., 10,000-lb. lots, frt. equald 100 lbs. 6.90 - —
smaller lots, same basis, 100 lbs. 7.40 - —
tribasic, NF, precip., bgs., c.l., Phytate, bgs., works lb. .50 - —
Resinate, precip., dms., frt. alld., works lb. .30½- —
Silicate, hydrated, bgs., c.l., works, lb. .06 - —
l.c.l., works lb. .06½- —
paint grade (see Wollastonite).
Stearate, ctns., c.l lb. .37 - —
l.c.l lb. .38 - .42
Sulfate (see Gypsum)
Calomel, USP, powd., dms lb. .42 - —
Camphene 46° m.p., dms., incl., c.l., works lb. .15 - —
l.c.l., same basis lb. .16½- —
tanks, same basis lb. .12½- —
Chlorinated, 67-69% (see Toxaphene).
Camphor, monobromated, NF, dms., kgs lb. 3.55 - —
nat. USP powd., cs., 100-lb. lots, lb. .60 - .65
tablets, 1-oz., ½-oz. cs lb. .85 - .90
syn., tech., 1 bbl. or more lb. .48 - —
USP, gran., powd., bbls., 2,000-lb. lots lb. .59 - —
1,000-lb. lots lb. .60 - —
smaller lots lb. .61 - —
tablets, tins, 2,000-lb. lots lb. .90 - —
1,000-lb. lots lb. .91 - —
smaller lots lb. .92 - —
Canada balsam (see Fir balsam).
Cantharides, Chinese, cs lb. 2.00 - 2.05
powd., bxs lb. 2.25 - 2.30
Russian, bgs lb. 4.00 - 4.05
powd., bxs lb. 4.35 - 4.40
Capsicum (see Pepper red).
Oleoresin, NF, from domestic pepper, dms lb. 4.50 - 5.25
from African pepper, dms lb. 4.35 - 5.00
Caraway seed, Dutch, bgs lb. .16½- .17
Carbazole, 97%, bbls., ton lots, works lb. 1.05 - —
Carbon dioxide, indust., wholesale, bulk, dlvd. metropolitan area, ton. 73.00 -115.00
cyls., same basis lb. .08 - —
solid, same basis lb. .035 - .040
Disulfide, 55-gal. dms., c.l., works, frt. equald. to competitive points lb. .07 - —
l.c.l., same basis lb. .08½- .09
5-gal. dms., 30 dms. to c.l., same basis lb. .13 - —
less than 30 dms lb. .16 - —
tanks, dlvd. lb. .0545- —
Tetrachloride, CP, consumers, dms., c.l., l.c.l., frt. alld. lb. .11½- .13¾
tech., consumers, dms., c.l., E. of Rockies, frt. alld. lb. .10½- —
W. of Rockies, f.o.b. stockpoints lb. .11 - —
l.c.l., E. of Rockies, frt. alld lb. .12¾- —
W. of Rockies, f.o.b. stockpoints lb. .13¼- —
tanks, E. of Rockies, frt. alld. lb. .09½- —
Carboxymethyl cellulose (see CMC).
Carbromal, NF, dms., 100-lb. lots, works lb. 4.00 - 4.25
smaller lots, works lb. 4.10 - 4.75
Cardamom seed, bleached, "A" lb. 3.20 - —
"B" lb. 3.10 - —
decorticated, Ceylon, cs lb. 1.95 - —
Guatemalan, cs lb. 2.95 - —
green, Ceylon, bgs. lb. 2.10 - 2.15
Carmine, No. 40, NF, bulk, 100-lb. lots or more, dlvd. lb. 14.40 - —
smaller lots, dlvd lb. 14.50 -15.20
Carotene, tech., 1,350,000 A units per gram, tins, 5-10 kilo lots, dlvd. gram. .295 - —

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Simplify the control of your processing operations with uniformly high quality Eastman acids and anhydrides. Known as the "standard of the industry," they are your assurance of a uniform product no matter when or in what quantities they are ordered. For more information, samples or specifications, write to Eastman Chemical Products, Inc., Chemicals Division, Kingsport, Tennessee.

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- For the preparation of butyric esters useful in formulating perfumes and flavorings

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- Acylating agent
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CHEMICAL PRODUCTS, INC.
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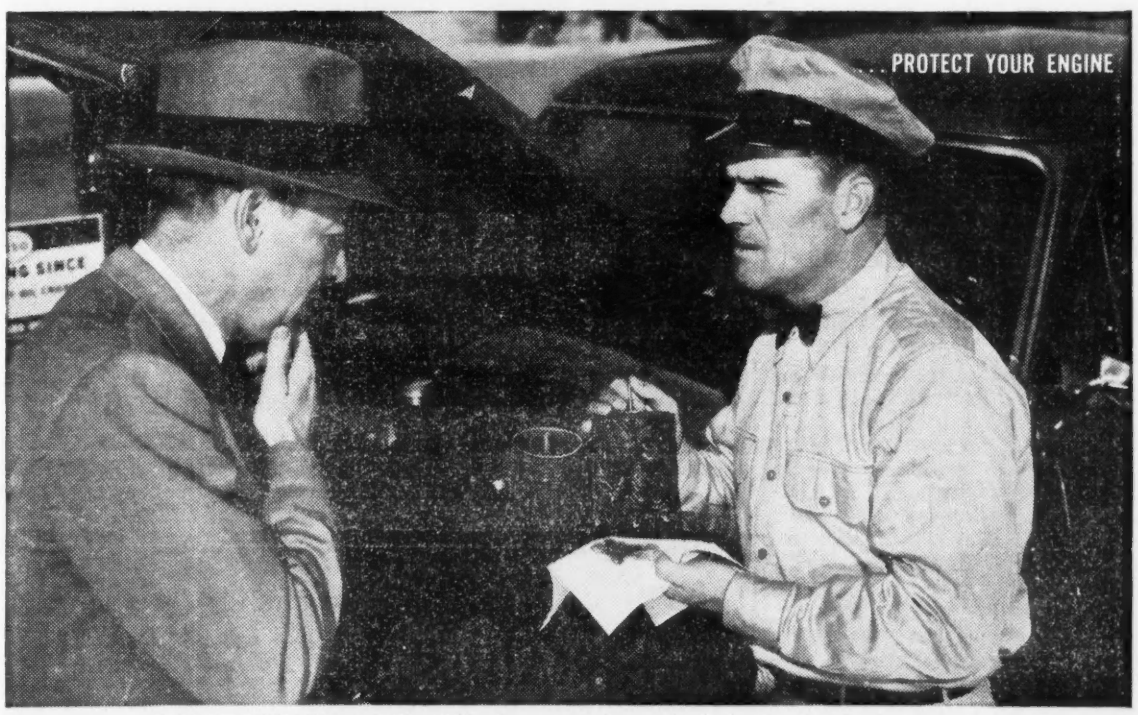
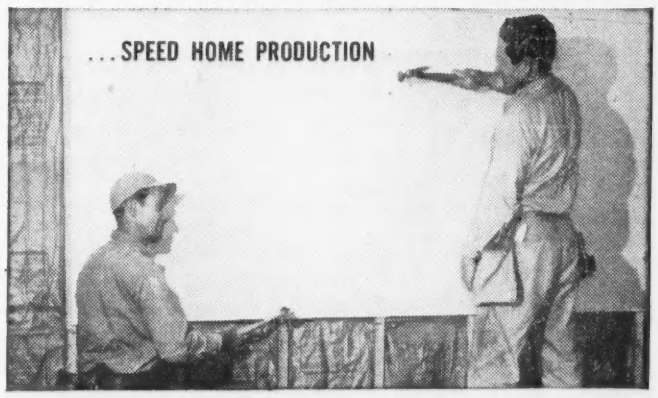
Carotene, tech., in carrot oil, 5,000,000 to 8,000,000 A units per lb., dms., works, million units.	.12	-	—
microcrystalline in oil, 400,000 A units per gram, dms., dlvd, million units.	.21	-	—
b-Carotene, pure, crystalline, 1,600,000 A units to 1,670,000 per gram., cns gram.	.33	-	—
in vegetable oil, 400,000 A units per gram, cns. gram.	.084	-	—
Carvol, bots lb.	4.50		8.00
Cascara sagrada bark, bulk lb.	.30		Nom.
Casein, dom., acid precip., standard, bgs., 10,000-lb. lots or more, shipt. point lb.	.32		Nom.
premium, bgs., 10,000-lb. lots or more, shipt. point lb.	.38	-	—
imp., Argentine acid-precip., grd., bgs., c.l., duty paid lb.	.21	-	.21½
New Zealand, same basis lb.	.25	-	.26
Cashewnut shell liquid, treated, dms., c.l., Newark, N. J. lb.	.22	-	—
ton lots, same basis lb.	.23	-	—
dm. lots same basis lb.	.25	-	—
Cassia, Batavia, "A", bls lb.	.19½	-	.20
"B" lb.	.19	-	.20
"C" lb.	.17½	-	.18
Corinje "A" lb.	.20	-	—
"B" lb.	.19½	-	—
"C" lb.	.18¾	-	.19
Castor beans, bgs., f.o.b. Brazil ton.	160.00		Nom.
Oil (see Oil, castor)			
Pomace, bgs., c.l., works ton.	35.00		-40.00
Castoreum, nat., cns lb.	5.00		-30.00
syn., cns lb.	9.00	-	—
Catechol, CP, cryst., fib. dms., works lb.	2.17½	-	—
resub., dms., works lb.	4.29½	-	—
Catnip leaves, Southern, bls lb.	.75	-	—
Celery seed, French, bgs lb.	.43	-	.44
Alleppey, bgs. lb.	2.15	-	2.20
Indian, bgs. lb.	.17	-	.17½
Cellulose acetate, flake, powd., ctns., bgs., 100-lb. lots or more, dlvd E lb.	.35	-	.46
Acetate-butyrate, powd., 17% butyryl content, bgs., dlvd E. lb.	.545	-	.555
27% butyryl content, bgs., dlvd. E lb.	.595	-	.605
38% butyryl content, bgs., dlvd. E lb.	.545	-	.555
50% butyryl content, bgs., dlvd E lb.	.585	-	.595
half-second, bgs., dlvd. E. lb.	.545	-	.555
Scrap (see Pyroxylin scrap).			
Cerium chloride, dms., dlvd. lb.	.35	-	—
Hydrate 74% CeO_2, fib. dms., 100-lb. lots or more lb.	1.44	-	—
77% CeO_2, fib. dms., 100-lb. lots or more lb.	1.74	-	—
Oxalate NF, bbls., bgs., works. lb.	1.32	-	—
Oxide, optical grade, bgs., 50-lb. lots or more, dlvd lb.	1.85	-	1.98
smaller lots, dlvd lb.	2.03	-	2.23
Chalk (see Calcium carbonate).			
Chamomile flowers, Hungarian style, cs lb.	.78	-	—
Roman, cs lb.	1.50	-	—
Charcoal, activated, NF, fib. dms., c.l., works lb.	.25	-	.32
5-ton lots, works lb.	.26½	-	.32½
smaller lots works lb.	.27	-	.50
Bone (see Black, bone).			
Hardwood, bulk, c.l., f.o.b. plant, ton.	52.00	-	—
briquets, bulk, c.l., f.o.b. plant, ton.	75.00		-80.00
40-lb. paper bgs., c.l., same basis ton.	81.00		-85.00
lump, bulk, c.l. ton.	55.00	-	—
Pinewood, gran., bgs., c.l., works, South ton.	57.00	-	—
l.c.l., works, South ton.	57.00		-67.00
lump, bgs., c.l., works, South, ton.	53.50	-	—
l.c.l., works, South ton.	56.50		-71.00
bulk, c.l., works, South ton.	38.00	-	—
t.l., works, South ton.	41.00	-	—
Chestnut extract, Italian, solid, 60% tannin, bgs., exdock, plus duty lb.	.09⅛	-	—
powd., 70% tannin, bgs., exdock, plus duty lb.	.10⅜	-	—
Chloral, tech., 94% min., dms., c.l., multiple units, 5 cars, works, tanks, works lb.	.21	-	—
Hydrate, USP, 40-lb. jars, 1,000-lb. lots lb.	1.00	-	—
l.c.l., works lb.	.24	-	—
500-lb. lots lb.	1.03	-	—
500-lb. lots or less lb.	1.05	-	—
Chloramine T, NF, bbls., works lb.	.75	-	1.00
Chlordan, agricultural, dms., c.l., frt alld lb.	.65	-	—
l.c.l., 5,000 to 10,000-lb. lots, frt alld lb.	.66	-	—
clarif., dms., c.l., frt. alld lb.	.69	-	—
l.c.l., 5,000 to 10,000-lb. lots, frt. alld lb.	.70	-	—
Chlorinated paraffin, 42%, dms., c.l., frt. alld lb.	.16¼	-	—
l.c.l., same basis lb.	.17¼	-	—
70%, dms., c.l., same basis lb.	.18¾	-	—
l.c.l., same basis lb.	.19¾	-	—
Rubber, 5, 10, 20 cps., ctns., c.l., works lb.	.55	-	—
l.c.l., works lb.	.56	-	—
125, 1,000 cps., ctns., c.l., works lb.	.65	-	—
l.c.l., works lb.	.66	-	—
Chlorine, liq., cyls., c.l., works, frt. equald lb.	.10¼	-	—
l.c.l., Metropolitan area lb.	.11¾	-	.13
tanks, single units, works, frt. equald 100 lbs.	3.05	-	—
multiple units, 5 cars, works, frt. equald 100 lbs.	3.92	-	—
3 cars, same basis 100 lbs.	4.12	-	—
2 cars, same basis 100 lbs.	5.12	-	—
1 car, same basis 100 lbs.	7.12	-	—
4-Chloro-2-aminotoluene, fused, bbls. lb.	1.45	-	—
m-Chloroaniline, dms., min. 10,000 lbs. or over, frt. alld lb.	.75	-	—
less than 10,000 lbs., same basis. lb.	.80	-	—
tanks, same basis lb.	.73	-	—
o-Chloroaniline, dms., c.l., frt. equald. lb.	.70	-	—
l.c.l., same basis lb.	.72	-	—
tanks, same basis lb.	.68	-	—
p-Chloroaniline, dms., c.l., works, frt. equald lb.	.75	-	—
l.c.l., same basis lb.	.77	-	—
o-Chlorobenzaldehyde, dms., t.l., works lb.	1.05	-	—
l.t.l., works lb.	1.20	-	—
p-Chlorobenzaldehyde, dms., c.l., works lb.	1.95	-	—
Chloroform, tech., dms., c.l., dlvd. E lb.	.18	-	—
l.c.l., same basis lb.	.19	-	—
tanks, same basis lb.	.17	-	—
USP, dms lb.	.30	-	—
2-Chloro-4-nitroaniline, paste, dlvd. E., 100% basis lb.	.81	-	—
powd., dlvd. E., 100% basis lb.	.86	-	—
4-Chloro-2-nitroaniline, powd., dlvd. E lb.	.80	-	—
o-Chlorophenol, dms., c.l., frt. equald. lb.	.35½	-	—
l.c.l., same basis lb.	.36½	-	—
p-Chlorophenol, dms., c.l., frt. equald lb.	.35½	-	—
l.c.l., same basis lb.	.36½	-	—
Chlorophyll, oil-soluble, not fixed, 4%, pails, tins, works lb.	4.25	-	—
copper fixed, 6½%, tins, pails, works lb.	4.23	-	—
dms., pails, works lb.	3.75	-	—
8%, pails, dms., works lb.	4.00	-	4.80
14%, dms., works lb.	8.90	-	—
conc., dom., 50%, dms., works, 100% basis lb.	42.00	-	—
75%, dms., works, 100% basis lb.	45.00	-	—
90%-100%, dms., works, 100% basis lb.	45.00	-	—
imp., 60%, tins, 100% basis. lb.	58.00	-	—
75% tins, 100% basis lb.	58.00	-	—
90% tins, 100% basis lb.	58.00	-	—
Chloropicrin, coml., bots lb.	1.50	-	—
cyls., 180 lbs., frt. alld lb.	.95	-	—
100 lbs., same basis lb.	.97	-	—
25 lbs., same basis lb.	1.22	-	—
Choline bitartrate, fib. dms., frt. adjusted lb.	1.25	-	1.35
Chloride, fib. dms., frt. adjusted, lb.	1.25	-	1.35
Dihydrogen citrate, fib. dms., frt. adjusted lb.	1.25	-	1.35
Chromium acetate, soln., 7½%, bbls., works lb.	.09¼	-	—
chys., works lb.	.11¼	-	—
Fluoride, bbls., works lb.	.51	-	.52
Green (see Green, chrome).			
Oxide (see Green chromium oxide).			
Trioxide, NF, bots lb.	.82	-	.89
Yellow (see Yellow chrome).			
Cinchona bark, NF, red, broken, bgs lb.	.35	-	.40
yellow, broken, bgs lb.	.35	-	.40
Cinchonidine, cryst., cns., 100-oz. lots. oz.	.65	-	—
Sulfate, cns., 100-oz. lots oz.	.35	-	—
Cinchonine, cryst., cns., 100-oz. lots. oz.	.52	-	.57
Sulfate, NF, cns., 100-oz. lots oz.	.27½	-	.30½
Cinchophen, NF, heavy density, dms., frt. adjusted lb.	3.70	-	4.05
standard density, dms., same basis lb.	3.50	-	3.85
Cinchophen-sodium, dms., frt. adjusted lb.	4.50	-	4.85
Cinnamic alcohol (see Alcohol cinnamic).			
Aldehyde, cns., dms. lb.	1.00	-	1.30
Cinnamon, Ceylon, No. 2, bgs. lb.	.88	-	—
"000", bgs., afloat lb.	1.06	-	—
Citral, bots., cns lb.	5.45	-	5.90
Citronellal, bots., dms lb.	3.10	-	—
Citronellol, bots., dms. lb.	4.85	-	5.15
Civet, artif, bots lb.	13.75		-15.00
nat., bots oz.	7.50		-15.00
Clay, ball, dom., airfloated, bgs., c.l., Tenn ton.	19.50	-	—
crushed, shed moisture, bulk, c.l., Tenn ton.	10.00	-	—
purif., bgs., c.l., Tenn ton.	20.50	-	—
imp., airfloated, bgs., c.l., Atl. port long-ton.	42.00		-45.00
lump, bulk, Atl. port long-ton.	27.00		-30.20
China, dom., dry-grd., airfloat, 99% 325 mesh, bgs., c.l., Georgia, works ton.	10.00	-	—
l.c.l., Georgia, works ton.	15.50	-	—
300 mesh, bgs., c.l., Georgia, works ton.	13.50		-14.50
l.c.l. ton.	35.00	-	36.00
imp., white, lump, bulk, c.l., exdock, Phila., Portland, Me. gross ton.	20.00		-35.00
powd., bgs., c.l., ex dock net ton.	50.00	-	—
l.c.l., ex whse net ton.	60.00		-65.00
Clove, Madagascar, bgs lb.	.38	-	.40
Zanzibar, bgs. lb.	.48	-	—
CMC, crude, 96%, low or medium vis., bgs., or fib. dms., 23,000 lbs., dlvd. E., 100% basis lb.	.37	-	—
less than 23,000 lbs., dlvd. E., 100% basis lb.	.41	-	—
65%, low or medium vis., bgs., or fib. dms., c.l., dlvd. E., 100% basis lb.	.37	-	—
l.c.l., dlvd. E., 100% basis. lb	.41	-	—
purif., high vis. (see Gum Cellulose).			
standard, low or medium vis., bgs., 23,000 lbs. or over, works, frt. alld lb.	.55	-	—
smaller lots, same basis lb.	.57	-	—
CMC prices W. of the Rockies are 2c. per lb. lower and are on a works basis.			
Coaltar, crude, resale for solns., dms., c.l., ex-whse gal.	.255	-	—
l.c.l., ex-whse gal.	.275	-	—
tanks, ex works gal.	.155	-	.159
refd., resale, dms., c.l., ex-whse, gal.	.2650	-	.32
l.c.l., ex-whse gal.	.2850	-	.34
tanks, ex-whse gal.	.1650	-	.1760
Cobalt acetate, 23.7%, dms., dlvd. lb.	1.20	-	—
Carbonate, 46% powd., bgs., dlvd. lb.	1.85	-	—
Chloride, 24.2% Co., dms., dlvd. lb.	1.20	-	—
Hydrate, 60-61% Co., dms., dlvd lb.	2.62	-	—

HOW *HERCULES* HELPS...



FOR MORE THAN 5,000 MILES, this oil filter has protected an engine by keeping dust, hard carbon and sludge from engine parts. Using porous paper made by paper mills from Hercules® chemical cotton as a filtering material, this equipment is one of the most important items in helping you to get the most in trouble-free miles from your car. (Photo courtesy PurOlator Products Inc.)

QUICKLY INSTALLED sheets of gypsum board are helping to produce new homes faster and more economically. To provide the surface of these sheets with the required water resistance, many manufacturers rely on Hercules Pexol® 240—one member of the large family of Hercules sizes for the paper industry.



HIGH GRADE COTTON is the product of healthy cotton plants. Insecticides based on Hercules® toxaphene help produce premium fiber by keeping the plants sturdy and free from insect pests that discolor the lint and increase trash content. Toxaphene means higher quality cotton at lower insecticide cost.

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INCORPORATED
936 Market St., Wilmington 99, Del.

SYNTHETIC RESINS, CELLULOSE PRODUCTS, CHEMICAL COTTON, TERPENE CHEMICALS, ROSIN AND ROSIN DERIVATIVES, CHLORINATED PRODUCTS, OXYCHEMICALS, EXPLOSIVES, AND OTHER CHEMICAL PROCESSING MATERIALS

056-3

HERCULES
CHEMICAL MATERIALS FOR INDUSTRY

Cobalt linoleate, fused, 8½% Co., dms lb. .75¾- —
liq., 6% Co., dms lb. .61 - —
Metal, 97-99%, kgs., ex whse lb. 2.60 - —
Naphthanate, liq., 6% Co., dms., dlvd lb. .48¼- —
Nitrate, 20.1% Co., bbls., dlvd lb. 1.00 - —
Oxide, black, 72½-73½% Co., kgs lb. 1.96 - —
70-71% Co., kgs lb. 1.90 - —
Phosphate, powd., 32.1% Co., kgs., dlvd lb. 1.69 - —
Resinate, fused, 3% Co., dms. lb. .29¾- —
dlvd lb. .79 - —
Sulfate cryst., 21% Co., dms., monohydrated, 33% Co., dms., dlvd lb. 1.32 - —
Tallate, 6% Co., dms., dlvd lb. .43¾- —
Cocaine, USP, cns., 100-oz lots oz. 17.80 - —
Hydrochloride, cns., 100-oz. lots. oz. 13.75 - —
Cocoa butter, bgs lb. .46 - .51
Codeine, NF, cns., 100-oz. lots oz. 13.25 - —
Hydrochloride, cns., 100-oz. lots oz. 11.75 - —
Phosphate, USP, cns., 100-oz lots oz. 10.25 - —
Sulfate, USP, cns., 100-oz lots oz. 10.75 - —
Codliver oil (see Oil, codliver).
Cohosh root, black, bls lb .20 - .22
blue, bls lb .20 - .22
Colchicine, USP, bots., cns. oz. 33.50 - 40.00
Colchicum root, bls lb. .45 - .55
seed, bgs lb. .75 - 1.00
Collodion, USP, dms lb. .32½- —
flexible, dms lb. .34 - —
Colocynth, pulp, bls lb. .25 - .30
Colombo root, bls lb. .15 - .16
Condurango bark, bales lb. .40 - .50
Copaiba balsam, cns., dms lb. .90 - 1.20
Copper acetate, bbls., c.l., works lb. .53 - —
l.c.l., works lb. .54 - —
Carbonate, 55%, bgs., c.l., works. lb. .4075- —
l.c.l., works lb. .4225- —
Chloride, anhyd., bbls., works lb. .50¾- .51¼
cryst., bbls., works lb. .34¾- .35¼
Cyanide, tech., bbls., 20,000-lb. lots or more lb. .80½- —
1,000-lb. lots or more lb. .81½- —
smaller lots lb. .83½- —
Gluconate, dms lb. 3.15 - 3.35
Hydrate, dms., c.l., frt. alld. E. of Miss lb. .57 - —
l.c.l., same basis lb. .57½- —
Metal, electrolytic, dlvd., Valley basis lb. .46 - —
Naphthenate, liq., 8% Cu, dms., frt. alld lb. .24½- —
Nitrate tech., cryst., bbls., works. lb. .33¼- —
Oleate, solid, 8% Cu, dms., works lb. .45 - —
Oxide, black, bbls., 100-2,000-lb. lb. lots, works lb. .57 - .64½
red, 97%, USN Type I, bbls., 100-5,000 lb. lots lb. .69½- .83½
90%, USN Type II, bbls., 100-5,000 lots or more, works. lb. .57½- .67½
Oxychloride, dms., c.l., works lb. .55 - —
l.c.l., works lb. .55½- .65½
Quinolinolate, fib. dms lb. 4.25 - 4.50
Resinate, precip., dms., frt. alld lb. .31½- —
Sulfate, CP, gran., bbls., works lb. .2360- —
cryst., 99% bgs., c.l., works 100 lbs. 16.70 - —
l.c.l., same basis 100 lbs. 17.20 - 19.70
Monohydrated, 35%, c.l., works. 100 lbs. 27.00 - —
l.c.l., works 100 lbs. 27.75 - —
tribasic, dealers', bgs. works, frt. equald 100 lbs. 35.85 - —
l.c.l., same basis 100 lbs. 37.35 - —
Undecylenate, dms lb 2.00 - 3.00
Copra, Atlantic, Gulf ports, c.i.f. ton. 177.50 - —
Pacific ports, c.i.f ton. 172.50 - —
Coriander seed, Moroccan, bgs lb. .09½- —
Roumanian, bgs lb. .08½- —
Yugoslavian, bgs lb. .08¾- .09
Corn sugar, tanners', chipped, paper bgs., c.l., 60,000 lbs. min. 100 lbs. 7.16 - —
l.c.l. 100 lbs. 7.31 - —
Syrup, 42°, dms., c.l. 100 lbs. 7.13 - —
l.c.l. 100 lbs. 7.28 - —
Corrosive sublimate (see Mercuric chloride)
Cortisone acetate, NNR bulk gram. 3.50 - 3.55
Cottonseed meal, expeller, 41%, bgs., Memphis ton. 53.00 - —
solvent, same basis ton. 51.50 - —
Cramp bark, NF bls lb 85 - 90
Coumarin, NF, cryst., dms lb. 3.20 - 3.45
Cream of tartar (see Potassium bitartrate).
Creosote carbonate, NF, bots, cbys lb. 3.05 - 3.20
Coaltar, crude, tanks, works, frt. adjusted gal. .22 - —
soln., 80%, tanks, works gal. .2068- —
refd., dms., c.l., works gal. .40 - .42
l.c.l., same basis gal. .50 - .53
tanks, same basis gal. .30 - .33
Wood, beechwood, cbys., dms lb. 1.60 - 1.65
hardwood, NF, bots., cbys lb 1.30 - 1.35
pinewood, dms., c.l., incl lb. .0561- —
l.c.l., incl lb. .0634- —
N. Y. whse lb. .0745- —
tanks, works lb. .0460- —
Cresol, tech., 50% below 204°C., dry above 207°C., wide distillation range, non-ret. dms., c.l., frt. equald lb. .1625- —
l.c.l., same basis lb. .1675- —
tanks, same basis lb. .145 - —
USP, non-ret. dms., c.l., same basis lb. .1775- —
l.c.l., same basis lb. .1825- —
tanks, same basis lb. .160 - —
m-Cresol, 95-98% dms., c.l., works. lb. .60 - —
l.c.l., works lb. .61 - —
m-p-Cresol, 5-95% 3°C., dms., c.l., frt. equald lb. .1775- —
l.c.l., same basis lb. .1825- —
tanks, same basis lb. .160 - —
2-97%, 2°C., dms., c.l., frt. equald. lb. .2175- —
l.c.l., same basis lb. .2225- —
tanks, same basis lb. .200 - —
o-Cresol, m.p. over 30°C., ret. dms., c.l., frt. equald lb. .1734- —
l.c.l., same basis lb. .1814- —
tanks, same basis lb. .16 - —
29°C., ret. dms., c.l., frt. equald. lb. .16 - —
l.c.l., same basis lb. .1614- —
tanks, same basis lb. .15 - —
25-29°C., dms., c.l., frt. equald. lb. .1534- —
l.c.l., same basis lb. .1614- —
tanks, same basis lb. .14 - —
p-Cresol, 98%, dms., c.l., dlvd lb. .50 - —
l.c.l., dlvd lb. .51 - —
tanks, dlvd lb. .49 - —
Methyl ether, cns lb. 1.90 - 2.50
Crotonaldehyde, 91-93%, dms., l.c.l., works lb. .24¼- .25
Cryolite, nat., Indust., bgs., c.l., works 100 lbs. 13.00 - —
l.c.l., works 100 lbs. 14.25 - —
Insecticide, dealers', bgs., c.l., dlvd 100 lbs. 16.75 - —
l.c.l., dlvd 100 lbs. 17.75 - —
Cube root, powd., 5% rotenone, bgs., c.l., t.l., works lb. .27 - .30
l.c.l., works lb. .28 - .31½

Cuheb berries, XX, NF, bgs. lb. .60 - .65
powd., cs lb. .75 - .80
Cumene, dms., c.l., works lb. .12 - —
l.c.l., works lb. .14 - —
tanks, works lb. .11 - —
Cumin seed, Iranian, bgs lb. .15½- .16
Turkish, bgs. lb. .14½- .15
Cutch extract, 55% tannin, bgs., ex dock, duty extra lb. .08½- —
Cyanamide, fertilizer mixing grades, 21% N, gran., bgs., Niagara Falls, Ont., contract ton 55.00 - —
pulv., 21% N, bgs., works, unit-ton 2.75 - —
Indust. grade, bgs., c.l. works ton. 75.00 - —
l.c.l., bgs., works ton. 96.00 - —
6-16 mesh, dms., c.l., works ton. 120.00 - —
l.c.l., works ton. 140.00 - —
Cyclohexane, 99% tech., dms., c.l., works gal. .70 - —
l.c.l., works gal. .72 - —
tanks, works gal. .55 - —
Cyclohexanol, tech., dms., c.l., works, frt. alld., E lb. .28½- .37¾
l.c.l., works, same basis lb. .30 - .38¼
tanks, works, same basis lb. .27 - .36¼
Cyclohexanone, tech., dms., c.l., works lb. .33½- —
l.c.l., works lb. .35 - —
tanks, works lb. .32 - —
Cyclohexene, min. 98%, b.r. 82.5°C-85°C, 360-lb. dms., c.l., works lb. .55 - —
l.c.l., same basis lb. .60 - —
tanks, same basis lb. .52 - —
Cyclohexylamine, dms., c.l., works. lb. .46½- —
l.c.l., works lb. .48½- —
tanks, works lb. .45 - —
Cyclopropane, CP, 2-lb. cyls., works. cyl. 48.00 - —
6 oz. cyls., works cyl. 12.00 - —
USP, hospitals, cyls., 40-gal. lots, gal. .38 - —
100-gal. lots gal. .37 - —
200-gal. lots gal. .36 - —

D

2-4-D, tech., dms., c.l., works, frt. equald lb. .37 - —
l.c.l., same basis lb. .42 - .46
Butyl ester, dms., c.l., works lb. .40 - —
l.c.l., same basis lb. .45 - .49
tanks, same basis lb. .39 - —
Isopropyl ester, dms., c.l., works. lb. .40 - —
l.c.l., works lb. .45 - .49
tanks, works lb. .39 - —
Dandelion root, bls lb. .35 - .40
DDD, tech., flake, grd. fib. dms., c.l., works lb. .45 - —
l.c.l., works lb. .46 - —
DDT, powder, bgs., c.l., works, frt. equald lb. .23 - .27
fib. dms., c.l., same basis lb. .24 - .28
smaller lots, same basis lb. .24 - .28
smaller lots, same basis lb. .25 - .29
1-Decanol, tech., dms., c.l., dlvd lb. .41 - —
l.c.l., dlvd. lb. .43 - —
tanks, dlvd. lb. .38½- —
Deertongue leaves, bls lb. .45 - —
Defluorinated phosphate, feed grade, 13% P, paper bgs., c.l., t.l., works ton. 49.50 - —
14½% P, paper bgs., c.l., t.l., works ton. 50.00 - —
17% P, paper bgs., c.l., t.l., works ton. 58.00 - —
18% P, paper bgs., c.l., t.l., works ton. 62.10 - —
Degras, neutral, bbls lb. .10 - .18
d-Desoxyephedrine hydrochloride bots. 24.00 - 25.00
dl, bots lb. 6.50 - —
Dextrin, corn, gum, paper bgs., c.l. 100 lbs. 9.18 - —
l.c.l. 100 lbs. 9.33 - —
canary, light paper bgs., c.l., 100 lbs. 8.92 - —
l.c.l. 100 lbs. 9.07 - —
dark, paper bgs., c.l. 100 lbs. 9.02 - —
white, paper bgs., c.l. 100 lbs. 8.76 - —
l.c.l. 100 lbs. 8.91 - —
Corn dextrin in cotton bgs. 15c. per 100 lbs higher.
Potato, imported, bgs lb. .10½- .11
Dextrose, USP, dms lb. .17¾- —
Diacetone (see Alcohol diacetone).
Diacetyl, flavor grade, bots lb. 4.50 - 5.50
Di-sec-amyl phenol, dms., c.l., works lb. .30¾- —
l.c.l., works lb. .32¼- —
tanks, works lb. .28¾- —
Di-tert-amyl phenol, dms., c.l., works lb. .30¾- —
l.c.l., works lb. .32¼- —
tanks, works lb. .28¾- —
o-Dianisidine, fib. dms lb. 2.00 - —
Dibenzyl sebacate, dms., c.l., works. lb. .89¾- .90
l.c.l., same basis lb. .90¼- .91
tanks, same basis lb. .88 - —
p-Dibromobenzene, bgs., 500-lb. lots. lb. .55 - —
Dibutyl phthalate, dms., c.l., dlvd. E lb. .32 - —
l.c.l., same basis lb. .33 - —
tanks, same basis lb. .30 - —
Sebacate, dms., c.l., works lb. .66 - —
l.c.l., works lb. .66½- .67
tanks, works, dlvd lb. .64 - .64½
Tartrate, dms., works, frt. alld. lb. .64 - —
Dibutylamine, dms., c.l., dlvd lb. .55 - —
l.c.l., same basis lb. .56 - —
tanks, same basis lb. .53 - —
2,6-Di-tert-butyl-p-cresol, dms., c.l., dlvd lb. .91 - —
l.c.l., dlvd. lb. .95 - —
Dicapryl phthalate, dms., c.l., dlvd., E lb. .30½- .31½
l.c.l., dlvd lb. .31½- .32½
tanks, dlvd lb. .29½- —
Sebacate, dms., c.l., works lb. .63 - —
l.c.l., works lb. .63½- .64
tanks, works lb. .61 - —
2,5-Dichloroaniline, dms., works lb. .83 - —
o-Dichlorobenzene, dms., c.l., frt. alld. E lb. .12¼- —
l.c.l., same basis lb. .13¼- —
tanks, same basis lb. .10¾- —
p-Dichlorobenzene, dms., c.l., frt. alld. E lb. .14½- —
l.c.l., same basis lb. .17 - —
1,4-Dichlorobutane, dms., c.l. or t.l., works lb. .33½- —
l.c.l., or t.l., works lb. .34 - —
tanks, works lb. .32 - —
Dichlorodiphenyltrichloroethane (see DDT).
Dichloropentanes, dist., dms., c.l., works lb. .05 - —
l.c.l., works lb. .06 - —
tanks, works lb. .03 - —
Dicyclohexylamine, dms., c.l., works. lb. .51 - —
l.c.l., works lb. .51¾- —
tanks, works lb. .49½- —
Dicyclohexyl phthalate, fib. dms., c.l., works, frt. alld lb. .58¼- .59
l.c.l., same basis lb. .59¼- .60

Didecyl phthalate, dms., c.l., works. lb. .33½- —
l.c.l., same basis lb. .34½- —
tanks, same basis lb. .31½- —
Dieldrin, dms., frt. alld lb. 1.80 - —
l.c.l., frt. alld lb. 1.85 - —
Diethanolamine, dms., c.l., dlvd. E. lb. .26½- —
l.c.l., same basis lb. .27½- —
tanks, same basis lb. .24½- —
Diethyl carbonate, dms., c.l., frt. alld lb. .47 - —
l.c.l., same basis lb. .48 - —
tanks, same basis lb. .45 - —
Ethanolamines, dms., c.l., dlvd. lb. .69 - —
l.c.l., dlvd. lb. .70 - —
tanks, dlvd lb .67 - —
Oxalate, dms., c.l., frt. alld lb. .42 - —
l.c.l. same basis lb. .43 - .45
tanks, same basis lb. .40 - —
Phthalate, dms., c.l., dlvd lb. .29 - —
l.c.l., dlvd lb. .30 - —
tanks, dlvd lb. .27 - —
Sulfate, dms., c.l., works lb. .18¾- —
l.c.l., works lb. .19¼- —
tanks, works lb. .17 - —
Diethylamine, dms., c.l., dlvd. E lb. .50½- —
l.c.l., same basis lb. .51½- —
tanks, same basis lb. .48½- —
N,N-Diethylaniline, dms., c.l., frt. alld lb. .51 - —
l.c.l., same basis lb. .52 - —
tanks, same basis lb. .50 - —
Di-2-ethylhexyl adipate (see Dioctyl adipate).
Phthalate (see Dioctyl phthalate).
Diethylene glycol, dms., c.l., dlvd. E. lb. .17¼- —
l.c.l., same basis lb. .18¼- —
tanks, same basis lb. .15¼- —
Boriborate, dms., l.c.l. lb. .31 - —
Diethyl ether, dms., c.l., works. lb. .47½- —
l.c.l., works lb. .48 - —
Monobutyl ether, dms., c.l., dlvd. E lb. .30¼- —
l.c.l., dlvd. E lb. .31¼- —
tanks, dlvd. E lb. .28¼- —
acetate, dms., c.l., works lb. .30 - —
l.c.l. works lb. .30½- —
tanks, dlvd. E lb. .28¼- —
Monoethyl ether, dms., c.l., dlvd. lb. .22 - —
l.c.l., dlvd lb. .23 - —
tanks, dlvd lb. .20 - —
acetate, dms., c.l., works lb. .26¾- —
l.c.l. works lb. .27¼- —
tanks, dlvd. E lb. .25¼- —
Monomethyl ether, dms., c.l., dlvd lb. .20½- —
l.c.l., dlvd lb. .21½- —
tanks, dlvd lb. .18½- —
Diethylenetriamine, dms., c.l., dlvd. E lb. .43½- —
l.c.l., dlvd. E lb. .44½- —
tanks, dlvd. E lb. .41½- —
Diethylstilbestrol, USP, bots., 10-kilo lots kilo. 100.00 - 147.50
kilo. 110.00 - 152.50
Digitalis leaves, USP, dom., dms., lb. .90 - 1.10
Digitoxin, USP, bots gram. 5.00 - 5.50
Diglycol laurate, dms lb. .35 - .38
Stearate, dms., ton lots lb. .25 - —
Dinexyl sebacate, dms., c.l., works. lb. .64 - —
l.c.l., works lb. .64½- .65
tanks, works lb. .62 - —
Dihydrazine sulfate, dms., works. lb. 1.10 - 1.25
Dihydrostreptomycin hydrochloride, bulk gram. .07 - .0745
Sulfate, bulk gram. .07 - .0745
1,2-Dihydroxy anthraquinone, dms., works lb. 2.75 - —
2,2-Dihydroxy-5-5-dichloro-diphenyl-methane, pure, dms lb. 2.55 - —
tech., dms lb. 1.09 - —
Di-isobutyl ketone, dms., c.l., dlvd. lb. .16 - —
l.c.l., dlvd lb. .17 - —
tanks, dlvd lb. .14 - —
Phthalate, dms., c.l., dlvd. E lb. .31 - —
l.c.l., same basis lb. .32 - —
tanks, same basis lb. .29 - —
Di-isobutylene, dms., c.l., dlvd. E lb. .10 - —
l.c.l., dlvd. E lb. .11 - —
tanks, dlvd E lb. .08 - —
Di-iso-octyl pnthalate, dms., c.l., dlvd lb. .32½- —
l.c.l., same basis lb. .33½- —
tanks, same basis lb. .30½- —
Sebacate, dms., c.l., works lb. .63 - —
l.c.l., works lb. .63½- .64
tanks, works lb. .61 - —
Di-isopropanolamine, dms., c.l., dlvd. lb. .22¾- —
l.c.l., same basis lb. .23¾- —
tanks, same basis lb. .20¾- —
Di-isopropylamine, dms., c.l., dlvd. E. of Rockies lb. .50 - —
l.c.l., same basis lb. .51 - —
tanks, same basis lb. .48 - —
Dillseed, dewhiskered, bgs lb. .10 - .10½
nat., bgs. lb. .09 - —
Dimethyl anthranilate, cns. lb. 5.25 - 5.75
Chloroacetal, dms., c.l., works lb. .45 - —
l.c.l., works lb. .50 - —
tanks, works lb. .40 - —
Ethanolamines, anhyd., dms., c.l., dlvd lb. 1.22 - —
l.c.l., dlvd. lb. 1.23 - —
tanks, dlvd. lb. 1.20 - —
70%, dms., c.l., dlvd., 100% basis, contained amines lb. .68 - —
l.c.l., dlvd., 100% basis lb. .69 - —
tanks, dlvd, 100% basis lb. .66 - —
Hydroquinone, dms. lb. 1.70 - 2.75
Phthalate, dms., c.l., works lb. .29½- —
l.c.l. works lb. .30½- —
tanks, works lb. .27½- —
Sebacate, dms., c.l., works lb. 1.27 - —
l.c.l., dlvd. lb. 1.28 - —
tanks, works lb. 1.25 - —
Sulfate, 55-gal. ret. dms., c.l., works lb. .15 - —
l.c.l., works lb .16 - —
10-gal. ret. dms., l.c.l., works. lb. .16¼- —
Dimethylamine, 25% soln., dms., c.l., frt. equald lb. .42 - —
l.c.l., frt. equald lb. .42½- —
tanks, frt. equald lb. .33 - —
40% soln., dms., c.l., frt. equald lb. .39 - —
l.c.l., frt. equald lb. .39½- —
tanks, frt. equald lb. .33 - —
N,N-Dimethylaniline, dms., c.l., frt. alld lb. .29½- —
l.c.l., frt. alld lb. .30½- —
tanks, frt. alld lb. .28½- —
N,N-Dimethylformamide, dms., works. lb. .34 - .39
tanks, works lb. .33 - —
2,4-Dinitroaniline, dms., 1,000-lb. lots, frt. equald lb. .68 - —
smaller lots lb. .71 - —
m-Dinitrobenzene, 85°C., dms lb. .22 - —
89°C., dms lb. .24 - —
2,4-Dinitrochlorobenzene, crystalizing at 46½°C., dms., c.l., frt. alld. E lb. .15¼- —
l.c.l., frt. alld. E lb. .15¾- —
tanks, frt. alld. E lb. .15 - —
crystalizing at 49°C., dms., c.l., frt. alld. E lb. .20¼- —
l.c.l., frt. alld. E lb. .20¾- —
tanks, frt. alld. E lb. .20 - —
2,4-Dinitrophenol, bbls lb. .37 - —
2,4-Dinitrotoluene, oily, dms lb. .11 - —
refd., 63°C., dms lb. .23 - —

Dioctyl adipate, dms., c.l., works. lb. .42 - —
l.c.l., works lb. .43 - —
tanks, works lb. .40 - —
Phthalate, dms., c.l., frt. alld. lb. .32½- —
l.c.l., frt. alld lb. .33½- —
tanks, frt. alld lb. .30½- —
Sebacate, dms., c.l., works, lb. .60 - —
l.c.l., works lb. .60½- .61
tanks, works, dlvd lb. .58 - .58½
Di-o-tolylguanidine, dms., ton lots, frt. alld lb. .60 - —
smaller lots, frt. alld lb. .61 - —
1,4-Dioxane, dms., c.l., works lb. .28¾- —
l.c.l., same basis lb. .29¼- —
tanks, same basis lb. .27 - —
Dip oil (see Tar acid oil).
Dipentaerythritol, bgs., l.c.l., works. lb. .35 - —
Dipentene, dest-dist., dms., c.l., works, gal. .47 - —
l.c.l., works gal. .52 - —
ex-whse. gal. .62 - —
steam-dist., dms., c.l., works, South gal. .59 - —
dlvd. N. Y gal. .67 - —
tanks, works, South gal. .45 - —
Diphenyl, bbls., c.l., works lb. .15 - —
l.c.l., works lb. .16 - —
Diphenyl in bags ¼c. lower.
Oxide, perfume grade, cns lb. .54 - .61
Phthalate, dms., c.l., works lb. .51¾- —
l.c.l., works lb. .53¾- —
Diphenylamine, refd., flake, bgs., c.l., works, frt. equald lb. .31 - —
l.c.l., works, frt. equald lb. .33 - —
fused, tanks, works, frt. equald. lb. .29 - —
tech., fused, tanks, works, frt. equald lb. .28 - —
Diphenylguanidine, bgs., dms., ton lots, frt. alld lb. .50 - —
smaller lots, frt. alld lb. .51 - —
Diphenylhydantoin-sodium USP, dms lb. 5.00 - 5.66
Dipropylene glycol, dms., c.l., frt. alld lb. .17¼- —
l.c.l., same basis lb. .18¼- —
tanks, same basis lb. .15¼- —
Monomethyl ether, dms., c.l., dlvd. E lb. .20 - —
l.c.l., same basis lb. .21 - —
tanks, same basis lb. .18½- —
Divi-divi, 45% tannin, bgs., bls., c.l., U.S. ports, exdock ton. 70.00 - 72.00
Divinylbenzene, 20-25%, dms., c.l., works, frt. equald lb. .20 - —
l.c.l., same basis lb. .21 - —
tanks, same basis lb. .19 - —
50-60%, dms., c.l., works, 100% basis lb. 1.00 - —
l.c.l., works, 100% basis lb. 1.05 - —
Dodecylbenzene, dms., c.l., frt. alld lb. .14 - —
l.c.l., same basis lb. .15 - —
tanks, same basis lb. .12 - —
Dyes, coaltar, certified colors for food, drugs and cosmetics, 500-lb. and 1-lb. lots, dlvd:—
Blue, FD & C, No. 1 lb. 15.65 - 17.60
No. 2 lb. 15.65 - 17.60
Green, FD & C, No. 1 lb. 15.65 - 17.60
No. 2 lb. 19.60 - 22.85
No. 3 lb. 21.30 - 35.90
Red, FD & C, No. 1, cns lb. 5.90 - 7.85
No. 2 lb. 3.30 - 4.10
No. 3 lb. 19.60 - 22.85
No. 4 lb. 5.55 - 7.50
Violet, FD & C, No. 1, cns lb. 15.65 - 17.60
Yellow, FD & C, No. 1, cns lb. 9.15 - 11.05
No. 5 lb. 3.30 - 4.10
No. 6 lb. 3.30 - 4.10
Dyes, coaltar, certified colors for drugs and cosmetics, 200 lb. and 1 lb. lots, dlvd:—
Black, D&C, No. 1 lb. 10.50 - 10.95
Brown, D&C, No. 1 lb. 15.65 - 16.10
Green, D&C, No. 5 lb. 15.65 - 16.10
No. 6 lb. 15.65 - 16.10
No. 7 lb. 14.35 - 14.80
Orange, D&C, No. 3 lb. 10.50 - 10.95
No. 4 lb. 19.60 - 20.05
No. 5 lb. 5.25 - 5.70
No. 17 lb. 10.50 - 10.95
No. 18 lb. 23.55 - 24.00
No. 19 lb. 15.00 - 15.45
No. 21 lb. 3.10 - 3.60
No. 22 lb. 10.50 - 10.95
No. 23 lb. 24.20 - 24.65
No. 33 lb. 17.00 - 17.45
Violet, D&C, No. 2 lb. 15.65 - 16.10
Yellow, D&C, No. 7 lb. 10.50 - 10.95
No. 8 lb. 10.50 - 10.95
No. 10 lb. 13.05 - 13.50
No. 11 lb. 13.05 - 13.50
Dyes, coaltar, certified colors for drugs and cosmetics, external use, 1-lb. lots, works, 25-50 lb. lots, dlvd:—
Blue, Ext., D&C, No. 1, cns lb. 15.65 - 16.10
Green, Ext., D&C, No. 1, cns lb. 15.65 - 16.10
Red, Ext., D&C, No. 1, cns lb. 13.05 - 13.50
Yellow, Ext., D&C, No. 1, cns lb. 10.50 - 10.95
Dyes, coaltar, for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype), contract, dlvd. No.
20 Chrysoidine Y, dustless lb. .89 - —
27 Fast light, orange 2G lb. 1.09 - —
31 Phloxine 2G lb. .89 - —
36 Yellow 2G lb. 1.00 - —
40 Orange R extra, conc lb. 1.29 - —
57 Fuchsine 6B lb. 1.31 - —
79 Scarlet 2R lb. .88 - —
151 Orange AD lb. .67 - —
161 Orange RR lb. .80 - —
176 Fast red A lb. 1.18 - —
179 Rubine XX, conc lb. 1.25 - —
180 Blue F4B lb. 1.11 - —
561 Brown B lb. 2.45 - —
581 Black EB, 200% lb. 1.13 - —
185 Brilliant scarlet 3RU, conc. lb. 1.03 - —
202 Chrome blue black R, conc. lb. .91 - —
203 Chrome black T lb. .94 - —
208 Fast blue SR lb. 1.10 - —
216 Chrome red B lb. .92 - —
234 Brown Y lb. 1.08 - —
246 Blue black, extra, conc lb. 1.16 - —
275 Milling red 3R, conc lb. 1.62 - —
289 Navy blue 3R, conc lb. 1.44 - —
299 Black F, conc lb. 1.86 - —
304 Neutral black 2B, conc. lb. 2.43 - —
326 Fast scarlet 4BNC lb. 1.80 - —
332 Bismark brown RX, conc., dustless lb. 1.16 - —
365 Brilliant yellow, conc lb. 3.11 - —
382 Scarlet B lb. 2.20 - —
401 Diazo black BHD lb. .79 - —
406 Blue 2B, extra conc lb. 1.30 - —
419 Red FC lb. 1.23 - —
420 Brown M lb. 1.19 - —
448 Red 4BX, conc lb. 1.43 - —
518 Diamine sky blue FF, extra, conc lb. 1.65 - —
593 Green BY, conc lb. .87 - —
596 Yellow Brown K, extra lb. 1.09 - —
620 Yellow 2G lb. 1.11 - —
629 Fast Yellow GG lb. 1.97 - —
640 Yellow XX lb. 1.95 - —
655 Yellow OX lb. 2.24 - —
657 Green V lb. 2.31 - —
662 Brilliant green G lb. 3.07 - —
667 Milling green 6B, conc lb. 4.05 - —
671 Blue EG lb. 1.68 - —
681 Crystal violet powder lb. 2.15 - —
698 Violet 6BN Powder lb. 1.91 - —

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but what I ordered

was Merck Iodine Resublimed U. S. P. . . . !"

Neophyte secretaries are welcome to flatter us outrageously as long as they remember to specify the key word—Merck. Long-time members of the trade recognize us as a basic and century-old supplier of the finest chemicals including Iodine Resublimed U.S.P., Hydriodic Acid, Ethyl and Methylene Iodide, Ammonium, Calcium, Mercuric, Potassium and Sodium Iodides, and Iodic Anhydride.

Your Merck representative will be delighted to discuss your requirements with you.

Research and Production

for the Nation's Health

MERCK & CO., INC.

Manufacturing Chemists

RAHWAY, NEW JERSEY

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Dyes, coaltar, for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype), contract, dlvd.

720	Brilliant blue BBG	lb	2.07	—
729	Blue B, conc	lb	3.06	—
749	Red BX	lb.	.87	—
800	Chinoline yellow ZSS	lb	2.67	—
860	Induline base ZM	lb.	1.07	—
860	Induline base Z2R	lb.	1.07	—
814	Yellow NN, conc	lb.	3.11	—
841	Safranine GF, extra, conc.	lb	3.48	—
865	Nigrosine J	lb	4.76	—
922	Blue GXX	lb.	1.88	—
978	Black GXCF, conc	lb.	.32	—
1034	Alizarine red SC	lb	2.85	—
1054	Alizarine blue SAPX	lb.	3.20	—
1078	Alizarine green CG, extra.	lb	2.99	—
1085	Alizarine blue black B	lb.	2.56	—
1096	Golden orange GFD, single paste	lb.	2.19	—
1099	Dark blue BO, single paste.	lb.	1.93	—
1101	Jade green N, double paste.	lb.	1.10	—
1106	Blue RS, double paste	lb	3.26	—
1113	Blue BLFD, double paste	lb.	2.48	—
1150	Olive R, single paste	lb.	1.21	—
1151	Brown R, single paste	lb.	1.94	—
1217	Orange RD, double powder.	lb.	.31	—
1171	Indigo synthetic, 20% paste.	lb.	3.94	—
p-4	Brown PG	lb.	2.54	—
p-14	Brown EB	lb.	1.83	—

Dyes, coaltar, for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype), contract, dlvd.

p-24	Gray L	lb.	1.76	—
p-80	Diazo brilliant scarlet ROAD	lb.	3.07	—
p-202	Diazo black VJ, conc	lb.	2.10	—
p-244	Brilliant scarlet BN	lb.	1.44	—
p-813	Naphthol SWF	lb.	2.03	—

Dyes, coaltar, oil soluble, 100 lb. dms., dlvd.

24	Oil orange Z-7078	lb.	1.06	—
73	Oil scarlet ZEL	lb.	1.44	—

Dyes, coaltar, for stains, oil soluble, 100-lb. dms., sellers' works,

1073	Oil violet ZIRS	lb.	6.81	—
1078	Alizarine cyanine green base Z	lb.	6.13	—
1080	Oil violet special Z	lb.	6.81	—
	Oil black ZBC	lb.	4.46	—
	Oil black ZBD	lb.	3.03	—
	Oil black ZHH	lb.	4.61	—
	Oil black ZMM	lb.	6.52	—
	Oil blue ZN	lb.	8.02	—
	Oil blue ZV	lb.	4.95	—
	Oil orange ZMG	lb.	1.32	—
	Oil red Z-1700	lb.	1.49	—
	Oil yellow ZG, conc	lb.	6.33	—

Dyes, coaltar, spirit soluble, 100 lb. dms., dlvd.

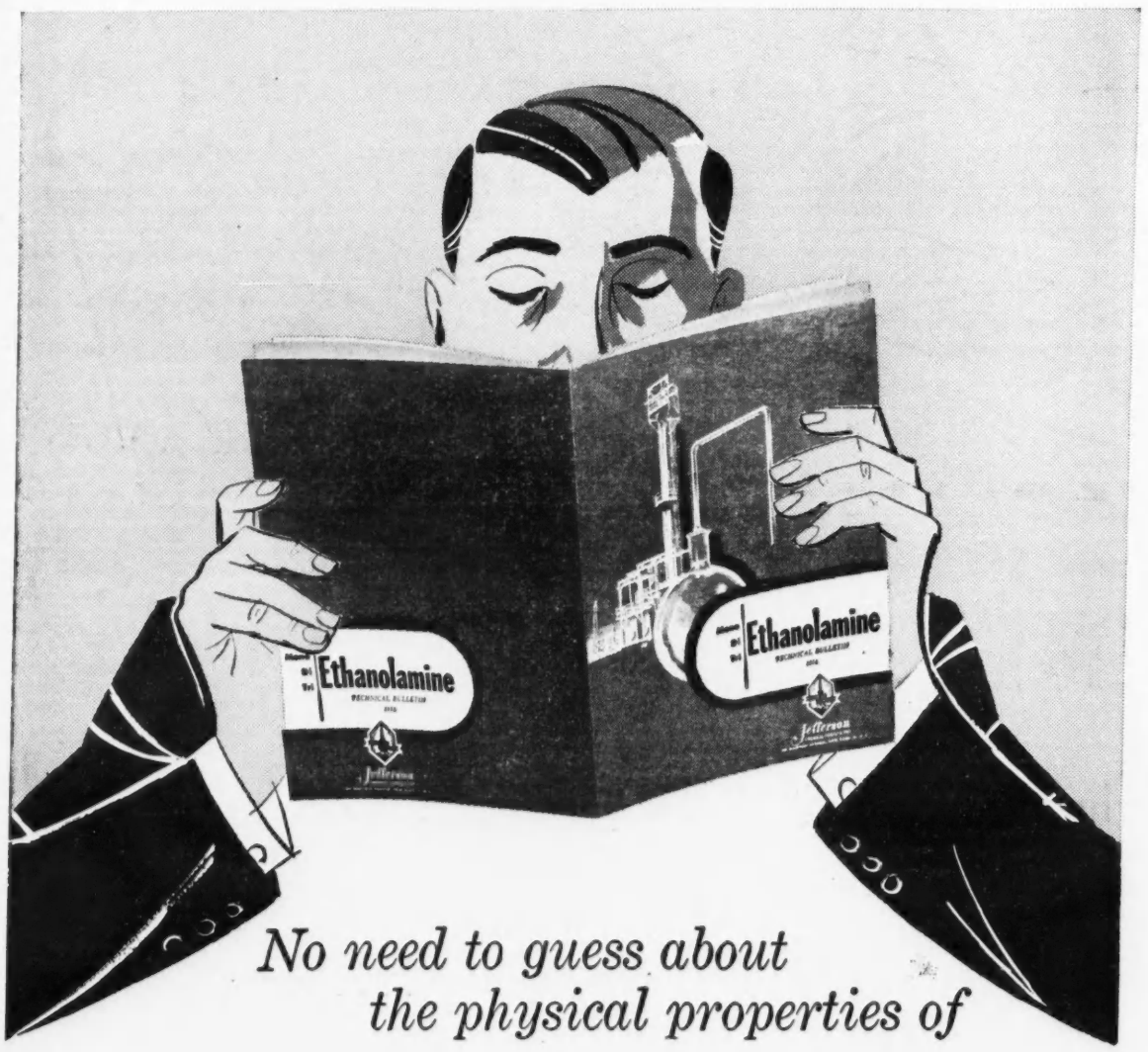
p-517	Spirit yellow ZR	lb.	4.62	—
p-520	Spirit orange ZR, conc	lb.	5.87	—
	Spirit black ZRB	lb.	2.95	—
	Spirit brown ZG	lb.	5.30	—
	Spirit red ZB, conc	lb.	6.41	—

E

Echinacea root, bls	lb.	1.10	—
Egg albumin (see Albumin).			
Yolk, dried, dom., bbls	lb.	1.12	1.14
tanners, bbls	lb.	.06	.06½
Elm bark, grinding, bls	lb.	.30	.32
powd., bbls., bxs	lb.	.45	—
select, bundles	lb.	.75	—
Emetine hydrochloride, USP, bots	oz.	42.50	44.00
Endrin, tech., dms., dlvd., 100% basis	lb.	3.75	—
Ephedrine, syn, USP, anhyd., bots., 100-oz. lots	oz.	.98	1.00
hydrous, bots., 100-oz. lots	oz.	.92	—
Hydrochloride, tins, 100-oz. lots.	oz.	.75	—
Sulfate, cryst., tins, 100-oz. lots.	oz.	.72	—
powd., tins, 100-oz. lots	oz.	.73	—
Epichlorohydrin, dms., c.l., dlvd	lb.	.35	—
l.c.l., dlvd	lb.	.36	—
tanks, dlvd	lb.	.33	—
Epinephrine, syn., USP, bots., 100-gram lots	gram.	.60	—
Epsom salt (see Magnesium sulfate).			
Ergosterol, unirradiated, cryst	kilo.	150.00	—
Ergot, NF, dms., tin-lined	lb.	2.00	—
Eserine salicylate, bots	oz.	84.00	—
Sulfate, bots	oz.	84.00	—
Ether (see specific product).			
Ethyl acetate, nat., ferment., 85-88%, dms., c.l., frt. alld	lb.	.14	—
l.c.l., frt. alld	lb.	.15	—
tanks, frt. alld	lb.	.11½	—
95-98%, dms., c.l., frt. alld.	lb.	.14¼	—
l.c.l., frt. alld	lb.	.15¼	—
tanks, frt. alld	lb.	.11¾	—
Ethyl acetate, nat., ferment., 99%, dms., c.l., frt. alld	lb.	.14½	—
l.c.l., frt. alld	lb.	.13½	—
tanks, frt. alld	lb.	.12	—
syn., 85-88%, dms., c.l., dlvd.	lb.	.14	—
l.c.l., dlvd	lb.	.15	—
tanks, dlvd	lb.	.11½	—
95-98%, dms., c.l., dlvd	lb.	.14¼	—
l.c.l., dlvd	lb.	.15¼	—
tanks, dlvd	lb.	.11¾	—
99%, dms., c.l., dlvd	lb.	.14½	—
l.c.l., dlvd	lb.	.15½	—
tanks, dlvd	lb.	.12	—
Acetoacetate, dms., c.l., dlvd	lb.	.58	—
l.c.l., dlvd	lb.	.59	—
tanks, dlvd	lb.	.56	—
Acrylate, dms., c.l., t.l., dlvd	lb.	.36	—
t.l., dlvd	lb.	.37	—
tanks, dlvd	lb.	.34	—
Aminobenzoate, USP (see Benzocaine).			
Bromide, tech., 98%, dms., c.l., frt. alld. E	lb.	.41	.43
l.c.l., frt. alld. E	lb.	.43	.45
Butyl ketone, dms, c.l., works	lb.	.35½	—
l.c.l., works	lb.	.36	—
tanks, works	lb.	.34	—
Butyrate, works	lb	.80	1.02
Carbamate (see Uretnane).			
Cellulose, vis. 7 cps., bgs., 5,000-lb. lots or more, works	lb.	.70	—
smaller lots, works	lb.	.72	.80
vis. 10, 20, 50, 100, 150 cps., bgs., 2,000-lb. lots or more, works	lb.	.65	.70
smaller lots, works	lb.	.67	.81
Chloride, tech., cyl., works		.20	.22
dms., works	lb.	.18	.20
tanks, works	lb.	10	—
Cinnamate, cns	lb.	2.71	3.45
Ether, absolute, ACS, dms	lb.	.27	—
anesthesia, USP, hospitals, 1-lb. cns	lb.	1.01	—
½-lb. cns	lb.	1.11	—
¼-lb. cns	lb.	1.21	—
indust., dms., c.l., dlvd	lb.	.12	—
l.c.l., dlvd. E	lb.	.13	—
tanks, dlvd. E	lb.	.10	—
Gallate, dms., 100 to 2,000-lb. lots	lb.	3.90	4.40
Iodide, cbys., works	lb.	3.30	—
Methacrylate, dms., c.l. and less than truckload, works, frt. equald	lb.	.51½	.52
Morphine hydrochloride, USP, bots	oz.	11.85	—
Nitrite (see Nitrous ether).			
Oenanthate, dms	lb.	1.00	1.50
Oleate, dms., l.c.l., works	lb.	No prices.	
Oxalate (see Diethyl oxalate).			
Silicate dist. (see Tetraethyl orthosilicate).			
40% available SiO_2, dms., c.l., dlvd	lb.	.49	—
l.c.l., dlvd	lb.	.50	—
tanks, dlvd	lb.	.47	—
Ethylethanolamines, mixed, dms., l.c.l., dlvd. E	lb.	.44½	—
tanks, dlvd. E	lb.	.41½	—
N-Ethyl-a-naphthylamine, dms., works,	lb.	1.02	—
c.l., dlvd. E	lb.	.43½	—
N-Ethyl-o-toluidide, bbls.	lb.	.88	—
Ethylamine (see Mono- Di- or Tri-)			
N-Ethylaniline, dms., c.l., frt. alld.	lb.	.51	—
l.c.l., frt. alld	lb.	.52	—
tanks, frt. alld	lb.	.50	—
Ethylbenzene, 99%, dms., c.l., or t.l., frt. equald	lb.	.17	—
l.t.l., same basis	lb.	.18	—
tanks, same basis	lb.	.15	—
Ethylene dichloride, dms. c.l., dlvd.	lb.	.10¼	—
l.c.l., same basis	lb.	.12¼	—
tanks, same basis	lb.	.09	—
Ethylene dichloride prices W. of Rockies, 1c. per lb. higher.			
Glycol, indust., dms., c.l., dlvd. E	lb.	.15½	—
l.c.l., same basis	lb.	.16½	—
tanks, same basis	lb.	.13½	—
Monobutyl ether, dms., c.l., dlvd. E	lb.	.21½	—
l.c.l., dlvd. E	lb.	.22½	—
tanks, dlvd. E	lb.	.19½	—
Monoethyl ether, dms., c.l., dlvd. E	lb.	.20½	—
l.c.l., dlvd. E	lb.	.21½	—
tanks, dlvd. E	lb.	.18½	—
acetate, dms., c.l., dlvd. E	lb.	.19	—
l.c.l., dlvd. E	lb.	.20	—
tanks, dlvd. E	lb.	.17	—
monoethyl ether, dms., c.l., dlvd. E	lb.	.20½	—
l.c.l., dlvd. E	lb.	.21½	—
tanks, dlvd. E	lb.	.18½	—
acetate, dms., c.l., dlvd. E	lb.	.28¾	—
l.c.l., dlvd. E	lb.	.29¼	—
tanks, dlvd. E	lb.	.27	—
Monostearate, triple pressed, dms	lb.	.34	—
Oxide, dms., c.l., dlvd. E	lb.	.21½	—
l.c.l., dlvd. E	lb.	.24½	—
tanks, dlvd. E	lb.	.15½	—
Trichloride (see Trichloroethane).			
Ethylenediamine, 85-88%, dms., c.l., dlvd. E, 100% basis	lb.	.46	—
l.c.l., dlvd. E., 100% basis	lb.	.47	—
tanks, dlvd. E., 100% basis	lb.	.44	—
Ethylvanillin, cns., 25-lb. lots	lb.	6.20	6.75
Eucalyptol, USP, cns., dms	lb.	1.40	1.50
Eugenol, USP, bots	lb.	2.65	—
Euphorbia herb, bls	lb.	.15	.17

F

Feldspar, 140-200 mesh, bulk, c.l., works	ton	18.50	—
Feldspar in bags $3 per ton higher.			
Fennel seed, Argentine, bgs	lb.	.17½	—
Czech, medium, bgs	lb.	.11½	—
Indian, light, bgs	lb.	.12	.13
Roumanian, bgs.	lb.	.11	—
Fenugreek seed, Indian, bgs	lb.	.08½	.09
Moroccan, bgs	lb.	.08½	.09
Ferric acetate, liquor, 28°, bbls., c.l., works	lb.	.09	—
l.c.l., works	lb.	.09¾	—
soln., USP IX, cbys	lb.	.16	—
djns.	lb.	.17	—
Cacodylate, NF, bots	lb.	13.00	14.00
Chloride, anhyd., tech., dms., c.l., works	100 lbs.	7.00	—
l.c.l., works	100 lbs.	7.85	—
indust., cryst., bbls., c.l., works.	100 lbs.	5.25	6.75
l.c.l., works	100 lbs.	5.75	7.25
42° Be, photo grade, cbys., c.l., works	100 lbs.	7.25	8.25
sewage grade, tanks, frt. equald, 100% basis.	100 lbs.	3.50	—
USP, cryst., dms., works	lb.	.07¼	.09
Citrate, gran., dms.	lb.	.86	—
Hypophosphite, NF, dms	lb.	3.45	—
Naphthenate, liq., 6% Fe., dms., frt. alld	lb.	.25¾	—
Oxalate, gran., dms	lb.	.85	.87
Phosphate, NF, soluble, gran., pearls, cs	lb.	.84	.85
Pyrophosphate, NF VII, soluble, powd., gran., pearls, dms., 10,000 lb. lots	lb.	.40½	—



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Ferric resinate, 6¾% Fe, dms., frt. alld	lb.	.29½	—
Stearate, dms., c.l., frt. alld	lb.	.37	—
l.c.l., frt. alld	lb.	.38	.43
Sulfate, partially hydrated, bgs., c.l., works	ton.	31.75	33.75
l.c.l., works	ton.	34.75	40.75
	lb.	.37	—
Ferric-ammonium citrate, brown, pearls, NF, gran., dms	lb.	.60	.63
green, pearls, USP XII, gran., dms	lb.	.60	.63
Oxalate, fine gran., dms	lb.	.25½	.28½
Ferric-potassium oxalate, fine gran., dms	lb.	.30½	.33½
Ferric-sodium oxalate, fine gran., dms	lb.	.25½	.28½
Ferrous gluconate, NF, dms	lb.	.94	—
Sulfate, gran., bgs., c.l., works.	ton.	34.50	—
l.c.l., dlvd. Metropolitan area	100 lbs.	3.35	4.25
bbls., c.l., works	ton.	40.00	—
bulk, c.l., works	ton.	27.00	—
USP, cryst., bbls., dms	lb.	.09½	.10
Fir, balsam, Canada, cns	gal.	32.00	—
Oregon, bbls.	gal.	4.00	—
Fishliver oil (see Oil fishliver).			
Fishmeal, dom., menhaden, 60% protein grd., bgs., Chesapeake Bay area	ton.	140.00	—
Scrap, same basis	ton.	136.00	—
Fleaseed (see Psyllium seed)			
Formaldehyde, USP, 37% (inhibited), methanol, Zone 1, dms., c.l., dlvd	lb.	.0675	—
l.c.l., works	lb.	.072	.0725
tanks, dlvd	lb.	.04	—
Zone 2, 12-15% methanol, dms., c.l., dlvd	lb.	.071	—
tanks, dlvd	lb.	.043	—
Methanol-free (uninhibited), Zone 1, tanks, dlvd	lb.	.0375	—
Zone 2, tanks, dlvd	lb.	.04	—
Fringetree bark, bls	lb.	.60	.61
Fullers' earth, bgs., c.l., Ill. mines,	ton.	19.00	—
powd., insecticide grade, dried, bgs., c.l., Ga. or Fla. mines	ton.	17.50	—
calcined, bgs., c.l., same basis	ton.	20.00	21.75
oil-bleaching grade, 100-mesh, bgs., c.l., same basis	ton.	16.30	17.00
200-mesh, bgs., c.l., same basis	ton.	17.50	18.00
spent, bgs., c.l., shipt. point	ton.	4.50	5.00
Furfural, dms., c.l., works	lb.	.13	—
l.c.l., works	lb.	.14	—
tanks, dlvd. E	lb.	.12	—
dlvd. W	lb.	.13	—
Fusel oil, refd., dms., c.l., dlvd	lb.	.18	—
l.c.l., dlvd	lb.	.19	—
tanks, dlvd	lb.	.15½	—
Fustic extract, cryst., No. 1, bbls., l.c.l	lb.	.47½	—
No. 2, bbls., l.c.l	lb.	.45½	—
No. 3, bbls., l.c.l	lb.	.43½	—
liq., No. 1, bbls., l.c.l	lb.	.22½	—
No. 2, bbls., l.c.l	lb.	21½	—
No. 3, bbls., l.c.l	lb.	.19	—
solid, No. 1, bxs., l.c.l	lb.	.45	—

G

G salt, bbls., frt. alld, 100% basis	lb.	.73	—
Gammapicoline (see g-Picoline)			
Gelatin, edible, pure (pork skin), 75 Bloom test, bbls., c.l	lb.	.48	—
150 Bloom test, bbl., c.l	lb.	.59	—
200 Bloom test, bbl., c.l	lb.	.66	—
225 Bloom test, bbl., c.l	lb.	.70	—
275 Bloom test, bbl., c.l	lb.	.77	—
Gelsemium root, bls	lb.	.23	.24
Gentian root, bls	lb.	.17	.20
grd., bbls., bxs	lb.	.22	.23
powd., bbls., bxs	lb.	.23	.24
Geraniol, extra, cns., dms	lb.	4.35	4.80
standard, cns., dms.	lb.	4.20	—
Geranyl acetate, cns	lb.	4.50	4.80
Ginger oleoresin, NF, from African root, bots	lb.	4.00	7.75
from Jamaican root, bots	lb.	6.00	10.25
Root, African, bls	lb.	.34	.35
Cochin, bgs.	lb.	.31	.32
Jamaican, No. 2, bgs	lb.	.60	Nom.
No. 3, bgs	lb.	.64	—
Nigerian, split, bgs	lb.	.30	.31
Glauber's salt, anhyd (see Sodium sulfate).			
Glue, bone, extracted, dry bone, 86 jellygrams, bgs., c.l., dlvd	lb.	.15	—
104 jellygrams, same basis	lb.	.17	—
131 jellygrams, same basis	lb.	.18	—
164 jellygrams, same basis	lb.	.20½	—
191 jellygrams, same basis	lb.	.21	—
222 jellygrams, same basis	lb.	.22	—
green, 40 jellygrams, bgs., c.l., dlvd	lb.	.14	—
65 jellygrams, same basis	lb.	.14½	—
86 jellygrams, same basis	lb.	.15	—
115 jellygrams, same basis	lb.	.15½	—
135 jellygrams, same basis	lb.	.18½	—
164 jellygrams, same basis	lb.	.19½	—
Bone glue, l.c.l. prices 1c. higher.			
Hide, 70-94 jellygrams, bgs., c.l., dlvd	lb.	.15	—
95-121, bgs., c.l., dlvd	lb.	.16	—
122-149, bgs., c.l., dlvd	lb.	.18½	—
150-177, bgs., c.l., dlvd	lb.	.21	—
178-206, bgs., c.l., dlvd	lb.	.23½	—
178-206 bgs., c.l., dlvd	lb.	.23½	—
207-236, bgs., c.l., dlvd	lb.	.26	—
237-266, bgs., c.l., dlvd	lb.	.28	—
267-298, bgs., c.l., dlvd	lb.	.30	—
299-330 bgs., c.l., dlvd	lb.	.32	—
331-362, bgs., c.l., dlvd	lb.	.34	—
363-394, bgs., c.l., dlvd	lb.	.36	—
395-427, bgs., c.l., dlvd	lb.	.38	—
428-460, bgs., c.l., dlvd	lb.	.39	—
461-494, bgs., c.l., dlvd	lb.	.40	—
495-529, bgs., c.l., dlvd	lb.	.41	—
Hide glue l.c.l. prices 1c. higher.			
Glycerine, nat., crude, saponification, 88%, to refineries, tanks	lb.	.18½	Nom.
soaplye, 80%, tanks	lb.	.16½	—
refd., BP, 98%, dms., c.l., dlvd.	lb.	.31½	—
l.c.l., dlvd	lb.	.32	—
tanks, dlvd	lb.	.30	—
dynamite, dms., c.l., dlvd	lb.	.31¼	—
l.c.l., dlvd	lb.	.31¾	—
tanks, dlvd	lb.	.29¾	—
high gravity, dms., c.l., dlvd.	lb.	.31¼	—
l.c.l., dlvd	lb.	.31¾	—
tanks, dlvd	lb.	.29¾	—
USP, CP, 95% dms., c.l., dlvd.	lb.	.30½	—
l.c.l., dlvd	lb.	.31	—
tanks, dlvd	lb.	.29	—
yellow, dist., dms., c.l., dlvd.	lb.	.30½	—
l.c.l., dlvd.	lb.	.31	—
syn., dms., c.l., dlvd	lb.	.31½	—
l.c.l., dlvd	lb.	.32	—
tanks, dlvd	lb.	.30	—
Glycine (see Acid aminoacetic).			
Glycerol (see Gylcerine).			
Glyoxal, 30%, dms., c.l., works	lb.	.18½	—
l.c.l., works	lb.	.19	—
tanks, works	lb.	.18	—
Golden seal root, NF, tested, bls.	lb.	2.25	2.59
powd., bxs	lb.	2.75	3.25
Graphite, amorph., powd., bgs., fib. dms., ex whse	lb.	.08	.09¼
crystalline, 88-90%, powd., bgs., fib. dms., ex whse	lb.	.19	.21¼
90-92%, powd., bgs., fib. dms., ex whse	lb.	.21	.24½
95-97%, powd., bgs., fib. dms., ex whse	lb.	.29	.31½
flake, No. 1, 90-95%, bgs., fib. dms., ex whse	lb.	.29	.31
No. 2, 90-95%, bgs., fib. dms., ex whse	lb.	.29	.31
Grease, white, choice, all hog, tanks, dlvd	lb.	.08¾	.08½
not all hog, tanks, dlvd	lb.	.08¼	—
yellow, tanks, dlvd	lb.	.07½	.07¼
Green, brilliant, thioflavin, toner, molybdated, PMA, kgs., works	lb.	5.10	—
tungstated, PTMA, kgs., works.	lb.	6.40	—
Chrome, CP, dark, light, medium, blue content 1 to 15%, bbls., dlvd. N. of Tenn. and N. C., E. of Miss., including St. Paul, Minn., Davenport, Rock Island, St. Louis	lb.	.40	—
16-30%, bbls., same basis	lb.	.40	—
31-45%, bbls., same basis	lb.	.41	—
45-49%, bbls., same basis	lb.	.44	—
reduced color, 25%, bbls., same basis	lb.	.19	—

Chrome green prices are ½c. higher, dlvd. at the following points, except as noted:—Ala., Fla., Ga., La. (Shreveport 1½c.), Miss. N. C., S. C., Tenn., Texas (Dallas, Ft. Worth, 1¼c.; El Paso, 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1c. higher dlvd. Pac. coast; for Denver, Pueblo, Salt Lake City, Wichita prices are equalized with Chicago.

Green, chromium oxide, hydrated, bbls., fib. dms., c.l., frt. alld.	lb.	1.00	1.10
pure, bgs., c.l., frt. alld	lb.	.42	—
l.c.l. same basis	lb.	.43	—
Dyes (see Dyes, coaltar).			
Malachite, straight, PTMA, bbls., works	lb.	4.60	—
Paris (see Paris green).			
Phthalocyanine toner, bbls., works.	lb.	3.95	—
resinated, bbls	lb.	3.50	—
water dispersable, bbls	lb.	1.71	—
Pigment B, kegs	lb.	1.35	—
paste, kegs	lb.	.38	—
Grindelia robusta herb, bls	lb.	.38	.40
Guaiacol, NF, cryst., dms., tins	lb	2.10	2.15
liq., cbys., dms	lb.	2.30	2.40
Carbonate, NF VII, dms	lb.	3.40	3.45
Gum, aloe (see Aloe).			
Arabic amber sorts, bgs	lb.	.22	.23
powd., USP, bbls	lb.	.27	.28
Asafetida (see A).			
Asphaltum (see A).			
Benzoin, Sumatra, cs	lb.	.38	.42
Camphor (see C).			
Cellulose, high vis., bgs., 23,000-lb. lots or more, works, frt. alld	lb.	.55	—
smaller lots, same basis	lb.	.57	—
Copal, Congo, No. 1, bgs	lb.	.23	—
No. 2, bgs	lb.	.19	.21
No. 3, bgs	lb.	.16½	.18
Manila C, bgs	lb.	.41	.43
CBB, bgs	lb.	.37	Nom.
DBB, bgs	lb.	.29	.31
Gum, copal, Manila, DK, bgs	lb.	No stocks.	
dust, bgs	lb.	.14	.16
MA, soft, bgs	lb.	.22	.24
WS, bgs	lb.	No stocks.	
Philippine, pale, chips, bgs	lb.	.24	.26
bgs	lb.	.24	.26
nubs, bgs	lb.	.33	.35
seeds, bgs	lb.	.20	.22
sorts, bgs	lb.	.22	—
Pontianak, chips, bgs	lb.	.28	—
nubs, bgs	lb.	.39	.40
Dammar, Batavia, A/E, cs	lb.	.27	.29
dust, bgs	lb.	.16½	.17¼
E, bgs	lb.	.20	.22
East India, batu, bold, bgs	lb.	.14	.15¼
nubs and chips, bgs	lb.	.08	.09
black, bold, bgs	lb.	.14	.16
unscraped, bgs	lb.	.11	.13
nubs and chips, bgs	lb.	.11	.13
pale, chips, bgs	lb.	.14½	.15¼
nubs, bgs	lb.	.18	.19
Siam, cs	lb.	.39	—
Singapore, No. 1, bgs	lb.	.47	.49
No. 2, bbls	lb.	.30	.31
No. 3 bbls	lb.	No stocks.	
dust, bgs	lb.	16½	.17
seeds, bgs	lb.	.20	.22
Ester, gum-rosin type, dms., c.l., dlvd. Ill., Md., Ky., Mich., Mid-Atl. States, N. E. States, Minneapolis, N. C., Ohio, St. Louis, St. Paul, Va., W. Va	lb.	.14½	.16
Wood-rosin type, dms., c.l., same basis	lb.	.15	.16
Guar, food grade, bgs., c.l	lb.	40	—
tech. grade, bgs., c.l	lb.	32	—

exceptional quality

Mathieson Formaldehyde

Compare your specifications for formaldehyde with our regular production and you'll know why more users have standardized on the Mathieson product. And, rigid quality controls assure high purity *consistently* . . . tank car after tank car, truck after truck.

Mathieson Formaldehyde is supplied in four regular grades—37% inhibited, 37%, 45%, and 50% low methanol—available in tank cars and tank trucks from Morgantown, W. Va. Compare your requirements with our production . . . just call an Olin Mathieson representative.

MATHIESON

MATHIESON CHEMICALS
OLIN MATHIESON CHEMICAL CORPORATION
INDUSTRIAL CHEMICALS DIVISION • BALTIMORE 3, MD.

3952

INORGANIC CHEMICALS: Ammonia • Bicarbonate of Soda • Carbon Dioxide • Caustic Potash • Caustic Soda • Chlorine • Hydrazine and Derivatives • Nitric Acid Hypochlorite Products • Muriatic Acid • Nitrate of Soda • Soda Ash • Sodium Chlorite Products • Sulphate of Alumina • Sulphur (Processed) • Sulphuric Acid
ORGANIC CHEMICALS: Ethylene Oxide • Ethylene Glycols • Polyethylene Glycols • Glycol Ether Solvents • Ethylene Dichloride • Dichloroethylether • Formaldehyde Methanol • Sodium Methylate • Hexamine • Ethylene Diamine • Polyamines • Ethanolamines • Trichlorobenzene • Polychlorobenzene • Trichlorophenol

Gum, karaya, No. 1, NF, powd., bbls. lb. .55 - —
No. 2, powd., bbls. lb. .45 - —
No. 3, powd., bbls lb. .40 - —
Locust bean, powd., bgs lb. .38 - .41
Myrrh, cs. lb. .55 - —
Opium (see Opium).
Olibanum siftings, cs lb. .15 - .20
tears, cs lb 22 - 30
Rosin (see Naval Stores, Protective Coatings Market).
Sterculia (see Gum Karaya).
Tragacanth, No. 1, ribbons, cs. lb. 3.50 - 4.25
No. 2, cs lb. 3.00 - 3.50
No. 3, cs lb. 2.50 - 3.00
powd., USP, bbls lb. 2.25 - 2.30
Gypsum, plaster of paris, 100-lb. paper, bgs. trucks, dlvd. N Y C ton.20.30 - —
Terra alba, dom., paper bgs., same basis ton.20.00 - —
works, N. Y. C ton.17.00 - —
imp English, 100-lb. paper bags, ex dock, N. Y. C. ton 55.00 - —
ex warehouse ton.60.00 -62.00

H

Hawthorn berries, bgs lb. .24 - .28
Heliotropin, 100-lb. lots, dms lb. 3.30 - 3.70
Hellebore root, dom., green, bls lb. 70 - .75
Helonias root, bls lb. 1.75 - 2.00
Hematine extract, cryst., No. 1, bbls., l.c.l lb. .47 - —
No. 2, bbls., l.c.l lb. .43 - —
No. 3, bbls., l.c.l lb. .41 - —
No. 4, bbls., l.c.l lb. .39 - —
No 5, bbls., l.c.l lb. .37 - —
paste, No. 1, bbls., l.c.l lb. .20½- —
Henbane leaves, bls lb. .35 - .40
Heptane, indust., tanks, Bayonne, N. J gal. .19 - —
Baytown, Tex gal. .14¾- —
Borger, Tex gal. .14¾- —
Hesperidin, purified, 25 lb. lots, f.o.b. works lb. 8.95 - —
Methylchalcone, bots., works, 50-lb. lots lb.22.50 - —
5-lb. lots lb.23.00 - —
1-lb. lots lb.23.50 - —
Hexachlorophene, dms lb. 1.98 - —
Hexalin (see Cyclohexanol).
Hexamethylenetetramine, tech., bgs., 20,000-lb. lots or more, Perth Amboy or N.Y.C. lb. .222 - —
1,000-19,999-lb. lots, same basis lb. .232 - —
smaller lots, same basis lb. .242 - —
5lb. dms., 1,000-lb. lots or more, same basis lb. .239 - —
smaller lots, same basis lb. .249 - —
USP, dms., 500-lb. lots or more, same basis lb. .40½- —
smaller lots, same basis lb. .41½- —
Hexane, indust., tanks, Bayonne, N. J gal. .19 - —
Baytown, Tex gal. .15¼- —
Borger, Tex gal. .15¼- —
l-Hexanol, dms., c.l., works lb. .24¼- —
l.c.l., works lb. .25 - —
tanks, works lb. .23 - —
Hexyl cinnamic aldehyde, dms. lb. 4.00 - 7.50
Salicylate, dms. lb. 1.75 - —
Hexylene glycol, dms., c.l., dlvd lb. .16¼- —
l.c.l., dlvd. lb. .17½- —
tanks, dlvd lb. .14 - —
a-Hexyl methacrylate, dms., less than truckload, works lb. .71 - —
Hexylresorcinol, USP, dms., 50-lb. lots or more, dlvd lb.14.00 - —
smaller lots, dlvd lb-44.50 - —
Histamine diphosphate, USP, bots. kilo.400.00 - —
l-Histidine hydrochloride, NF, fib. dms., 50-kilo lots, works. kilo.80.00 -85.00
1-5 kilo lots, works kilo.90.00 -95.00
Homatropine hydrobromide, USP. bots oz. 8.50 - —
Methylbromide, USP, bots oz. 5.65 - —
Hoofmeal, 17-18% ammonia, bulk, c.l., Chicago unit-ton. 6.25 - —
Horehound herb, bls lb. .16 - .19
Hydrastine, bots oz.29.50 -31.00
Hydrochloride, NF, bots oz.29.50 -31.00
Hydrastis (see Goldenseal).
Hydrazine, free base, ret. dms., Lake Charles, La lb. 3.00 - 3.30
85% ret. dms., same basis lb. 1.35 - 1.55
Hydrate, 100%, ret. dms., Lake Charles, La lb. 1.60 - 1.90
Hydrocortisone acetate, bulk, bots., dms. gram. 4.75 - 5.00
Alcohol, bulk, bots., dms. gram. 4.75 - 5.00
Hydrofuramide, dms., fib. ctns., works lb. .30 - .40
Hydrogen chloride, anhyd., 50-lb. cyls., c.l., works lb. .45 - —
l.c.l., works lb. .55 - .60
Hydrogen fluoride anhyd., cyls., dlvd. E lb. .30½- .32½
dlvd. W lb. .39 - —
tanks, works lb. .21 - —
Peroxide, USP, bbls., dlvd lb. .03¾- .05
35%, dms., c.l., dlvd lb. .202 - —
l.c.l., dlvd lb. .211 - —
tanks, dlvd lb. .1800- —
Hydroquinone, photo grade, bbls., dms. lb. .98 - 1.00
tech., dms., c.l., dlvd lb. .82½- —
l.c.l., dlvd lb. .84½- —
Hydroxycitronellal, cns lb. 7.65 - 7.90
Hyoscine salts (see Scopolamine).
Hyoscyamine, bots oz.13.50 - —
Hydrobromide, bots oz. 6.00 - 7.00
Sulfate, bots oz. 7.00 - 7.50
Hypernic extract, cryst., No. 2, bbls., l.c.l. lb. .52 - —
liq., No. 1, bbls., l.c.l lb. .35 - —
No. 2, bbls., l.c.l lb. .27 - —

I

Ichthammol, NF, jars lb. .75 - 2.57
Indian red (see Red, Indian).
Indigo (see Dyes, coaltar, 1171 Indigo synthetic).
Indole, CP, bots lb.17.00 -21.00
Inositol, bots., dlvd lb. 5.00 - —
dms., dlvd lb. 4.50 - 4.75
Insect flowers (see Pyrethrum).
Iodine, crude, kgs lb. 1.42 - —
resub., USP, dms., jars lb. 2.30 - 2.32
odochlorohydroxyquinolin, USP, dms. lb. 5.90 - —
Iodoform, NF, dms., kgs lb. 4.90 - 5.00
a-Ionone, cns lb. 5.30 - 5.60
b-Ionone, cs lb. 6.00 - 7.70
Ipecac root, bgs., whole lb. 7.50 - 8.00
powd., bbls., bxs lb. 8.50 - 9.00
Irish moss, bleached, prime, bls lb. .28 - .34
Iron compounds (see Ferric or Ferrous).
Isoborneol, cns lb. 1.25 - 1.70
Isobornyl acetate, cns lb. .62 - .95
Formate, dms lb. .80 - —
Propionate, dms lb. 1.15 - 1.45
Isobutyl acetate, perfume grade, cns lb. .75 - 1.00
solvent grade, dms., c.l., dlvd. E. of Rockies lb. .14¼- —
l.c.l., same basis lb. .15¼- —
tanks, same basis lb. .11¾- —
Isobutyraldehyde, CP, dms., c.l., dlvd. lb. .27½- —
l.c.l., dlvd lb. .28½- —
tech., dms., c.l., dlvd lb. .21½- —
l.c.l., dlvd lb. .22½- —
tanks dlvd lb. .19½- —
Isoeugenol, cns lb. 4.40 - 4.75
Isoniazid, powd., bulk, 25-kilo lots or more kilo.23.00 -25.50
smaller lots kilo.24.00 -26.00
Isopentane, coml. grade, tanks, f.o.b. Tex. refy. gal. .15½- —
Isonicotinic acid hydrazide (see Isoniazid).
Isophorone, dms., c.l., works lb. .24¼- —
l.c.l., works lb. .24⅝- —
tanks, works lb. .22½- —
Isopropanol (see Alcohol, isopropyl).
Isopropyl acetate, dms., c.l., dlvd. lb. .13 - —
l.c.l., same basis lb. .14 - —
tanks, same basis lb. .10½- —
Alcohol (see Alcohol, isopropyl).
Benzene (see Cumene).
Ether, dms., c.l., dlvd lb. .07 - —
l.c.l., dlvd lb. .09 - —
tanks, dlvd lb. .05 - —
Isopropyl-N-(3-chlorophenyl) carbamate, (CIPC), 70% in xylol, dms., c.l., t.l., works lb. .70 - —
l.c.l., works lb. .714 - .814
Isopropylamine (see Mono, Di, or Tri-).
Isopropyl-N-phenyl carbamate, 450-lb. fib. dms., c.l., t.l., works. lb. .75 - —
l.c.l., works lb. .80 - .90
Isoquinoline, dms., works lb. .65 - 1.25

J

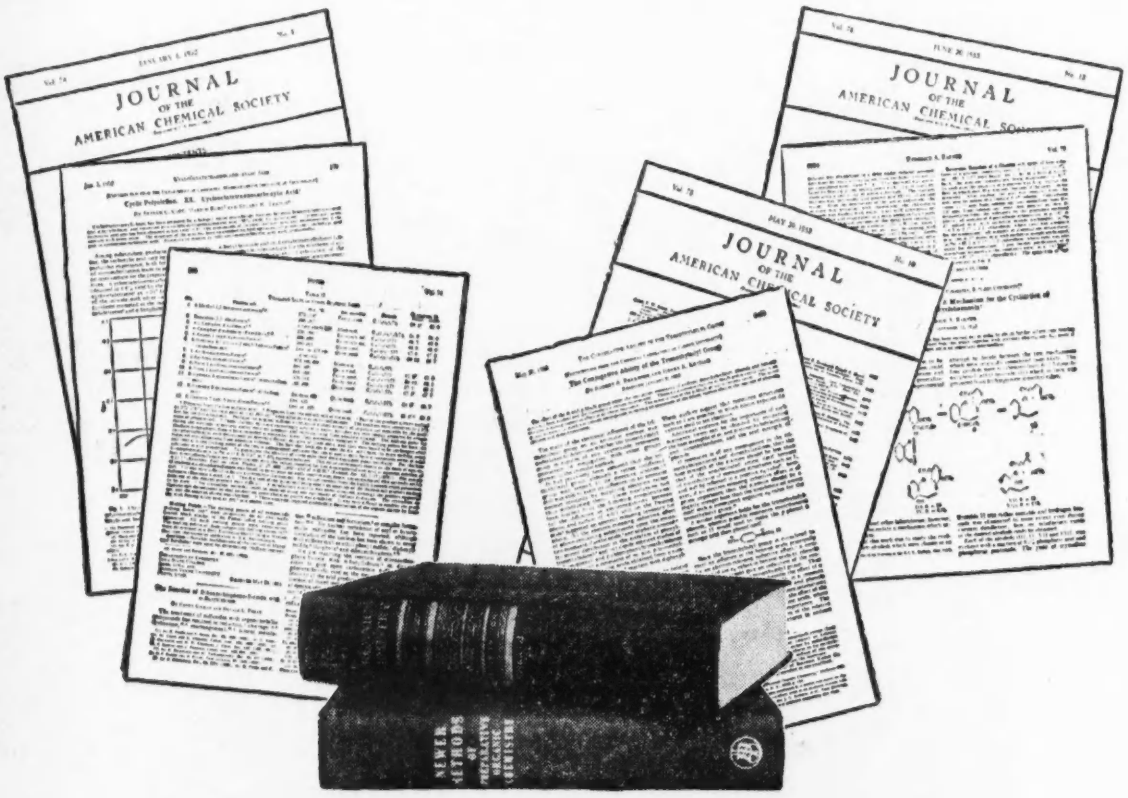
Jalap root, NF, bls lb. .45 - .55
powd., bbls., bxs lb. .55 - .65
Juniper berries, bgs lb. .18 - .20
Tar, NF, dms lb. .42 - .60

K

Kaolin (see also Clay China).
NF, powd., fib. dms lb. .10 - .12
colloidal, fib. dms lb. .15½- .17¼
Kola nuts, bgs lb. .15 - —

L

Lactose, edible, fib. dms., 30,000-lb. lots, works lb. .19½- —
2,000-lb. lots, works lb. .20¼- —
200-1,800-lb. lots, works lb. .20¾- —
Edible lactose in bgs. lc. lower.
fermentation grade, bgs., c.l., works lb. .08½- —
USP, fib. dms., 30,000-lb. lots, works lb. .21½- —
2,000-lb. lots, works lb. .22¼- —
200-1,800-lb. lots, works lb. .22¾- —
USP lactose in bgs. lc. lower.
Lady's slipper root, bls lb. 1.70 - 1.75
Lanolin, cosmetic, dms., works lb. .26 - .28
USP, anhyd., dms., works lb. .24 - .26
hydrous, dms., works lb. .23 - .25
Lard, cash, dms., Chicago lb. .1310- —
Larkspur seed, bgs lb. .20 - .23
Laurel leaves, Greek, bls lb. 12 - —
Portuguese, bls. lb. .11 - —
Turkish, bls. lb. .26 - .26½
Yugoslavian, bls lb. .11 - —
a-Lauryl methacrylate, dms., c.l. or t.l. works lb. .65½- —
Lavender flowers, medium, bls lb. .75 - .80
ord., bls lb. .25 - .40
select, bls lb. .90 - —
Lead acetate, white, cryst., bbls lb. .23½- —
gran., bbls lb. .24½- —
powd., bbls lb. .24½- —
NF, cryst., gran., powd lb. .32½- .33½
Arsenate, acid powder, dealers, 3-lb. bgs. or larger, c.l., frt. alld on 96 lbs. or more lb. .27½- —
l.c.l., frt. alld lb. .28½- —
1-lb. bgs., c.l lb. .41½- —
l.c.l. lb. .42½- —
Blue, basic sulfate, bbls., c.l., shipt. point, frt. alld lb. .17¼- —
l.c.l., same basis lb. .18¼- —
Carbonate (see Lead, white, basic carbonate).
Chloride, dms lb. .45 - —
Iodide, NF, V jars lb. 3.82 - —
Linoleate fused, 26% Pb, dms. lb. .33 - —
Metal pigs, prime, N. Y lb. .16 - —
St Louis lb. .1580- —
Metallic paste, dms., 20,000-40,000-lb. lots, works lb. .33¾- —
10,000-20,000-lb. lots, same basis lb. .34¾- —
200-2,000-lb lots, same basis, lb. .35¾- —
Prices ex whse. Jersey City, N. J., 4½c. per lb. higher.



OVERLOOKING LITHIUM?

At every new meeting of the A.C.S., research chemists are introduced to more and more papers involving the use of lithium metal, its derivative, lithium hydride, and organolithium compounds in organic reactions. Further evidence of interest in lithium can be found in the presentation of over 700 organolithium papers since 1949.

Examples of lithium organic reactions include lithium metal as a reducing agent in organic reductions using various organic and inorganic solvents. In organic synthesis of the Grignard type, lithium organic compounds, both alkyls and aryls, are used to advantage, particularly where other reagents react sluggishly or in poor yield. They may also be used for the preparation of organometallic compounds of other metals, and as an analytical reagent for nitrogen in rare gases. Lithium hydride is used as a drying agent, as a hydrogen generator, and as a condensing agent. The hydride, particularly, is beginning to receive more interest as research workers learn further about its characteristics.

We invite you to explore, with us, the possibilities of these valuable research tools.

... trends ahead in industrial applications for lithium

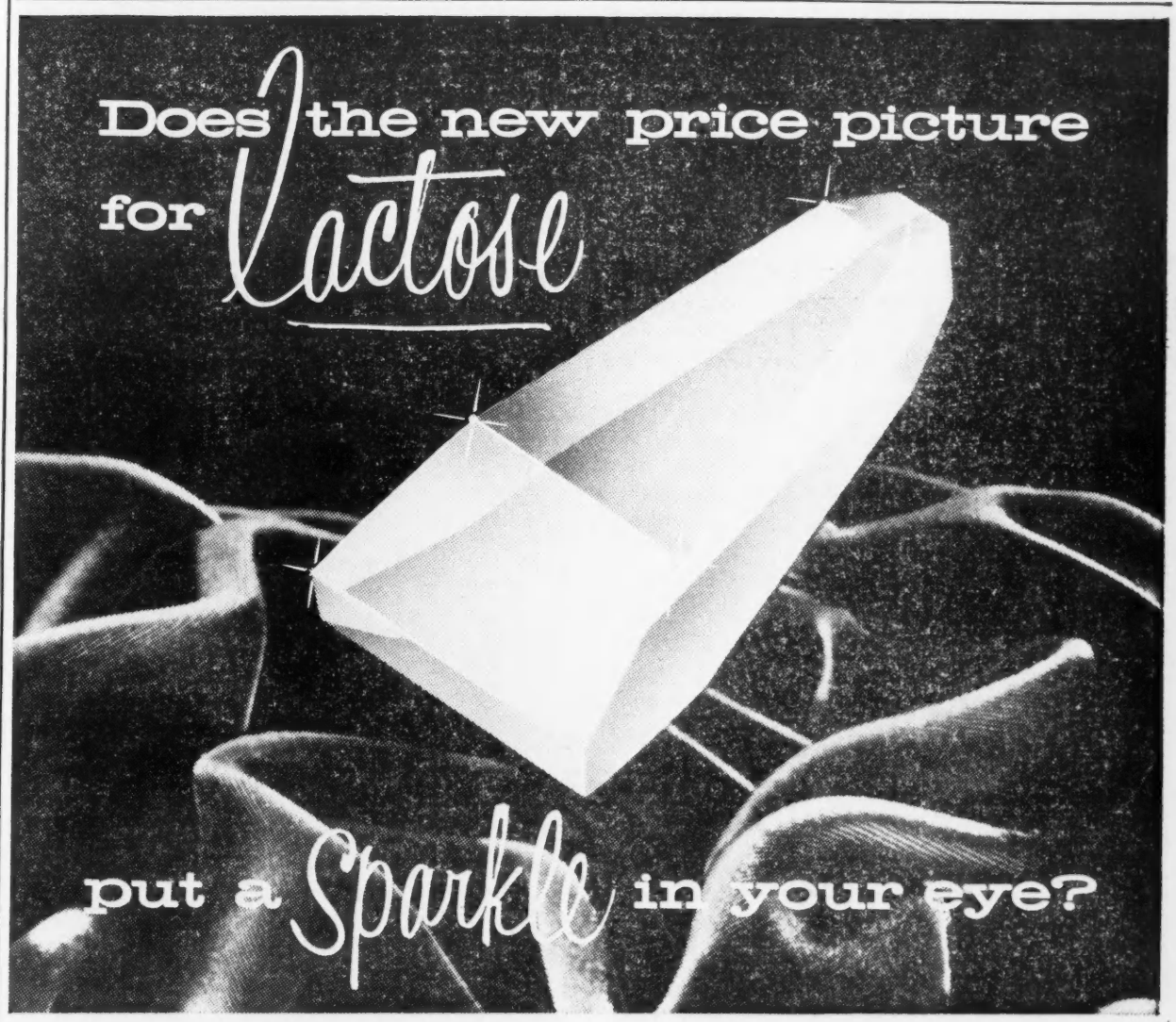
LITHIUM CORPORATION OF AMERICA, INC.
2530 RAND TOWER
MINNEAPOLIS 2, MINN.

MINES: Keystone, Custer, Hill City, South Dakota • Bessemer City, North Carolina • Cat Lake, Manitoba • Amos Area, Quebec • BRANCH SALES OFFICES: New York Pittsburgh • Chicago • CHEMICAL PLANTS: St. Louis Park, Minnesota • Bessemer City, North Carolina • RESEARCH LABORATORY: St. Louis Park, Minnesota

Lead monosilicate, bgs., c.l., works, frt. equald. lb. .20 - —
l.c.l., same basis..... lb. .2075 - —
Naphthenate, liq., 16% Pb, dms., dlvd. lb. .17 - —
24% Pb., dms., dlvd..... lb. .21 - —
solid, 37% Pb., dms., dlvd..... lb. .27½- —
Nitrate, bbls..... lb. .23¾- —
Orthosilicate-silica gel, 50-60% PbO, dms., works.. lb. .29¾- .34¼
Peroxide, tech., powd., bbls.... lb. .38¾- .40¼
Phthalate, dibasic, dms., works. lb. .41 - —
Red, 95% Pb_3O_4, or less, bbls., c.l., works, frt. alld.. lb. .18½- .19
l.c.l., same basis..... lb. .19 - .20
97% Pb_3O_4, bbls., c.l., same basis. lb. .18¾- .192
l.c.l., same basis..... lb. .19¼- .202
98% Pb_3O_4, bbls., c.l., same basis. lb. .19 - .1935
l.c.l., same basis..... lb. .19½- .2035
Resinate, precip., 23% Pb, dms., dlvd. lb. .32½- —
Salicylate, normal, dms., works. lb. .46 - —
Silicate (see Lead, white, basic, silicate).
Sulfate (see Lead, blue, basic sulfate Lead white, basic sulfate).
Tallate, liq., 16% Pb, dms.... lb. .15 - —
24% Pb., dms..... lb. .18½- —
solid, 30%..... lb. .23¼- —
White, basic carbonate, bgs., c.l., shipt. point, frt. alld. lb. .19 - —
l.c.l., same basis..... lb. .20 - —
Silicate, bgs., c.l., shipt. point, frt. alld. lb. .17¼- —
l.c.l., same basis..... lb. .18¼- —
sulfate, bgs., c.l., shipt. point, frt. alld. lb. .17¼- —
l.c.l., same basis..... lb. .18¼- —
Lecithin, edible, tech., bleached, non-ret, dms., c.l., works. lb. .15 - .17
l.c.l., same basis..... lb. .15½- .17½
unbleached, non-ret, dms., c.l., same basis. lb. .13 - .15
l.c.l., same basis..... lb. .14½- .16½
Lemon bioflavinoid complex, 25-lb. lots, f.o.b., works. lb. 9.00 - —
dl-Leucine, dms., works ..... lb. 12.25 - 15.00
Licorice root, whole, bbls..... lb. .10 - .12
gran., bbls..... lb. .15 - .17
powd., bbls..... lb. .12 - .15
Lignosulfonate, 70% tannin, bgs., c.l., works lb. .06½- —
l.c.l., works..... lb. .06¾- —
Lime, chemical (quicklime), bulk, c.l., metropolitan N. Y. destination, freight equalized with nearest producing point ton. 18.71 - —
Hydrated, bulk, c.l., same basis. ton. 20.21 - —
Spray, bgs., c.l., same basis. ton. 23.21 - —
Lime salts (see Calcium).
Lime-ammonium nitrogen 20.5% N (see Ammonium nitrate with dolomite).
Limestone, grd., bgs., works. ton. 3.50 - 4.00
Linalool, ex bois de rose oil, dms. lb. 4.10 - 5.00
ex lignaloe wood oil, dms..... lb. 5.30 - 7.10
Linalyl acetate, ex bois de rose, 90-92%, dms.. lb. 4.50 - 5.10
96-98%, dms..... lb. 6.75 - 7.15
ex petitgrain, bots..... lb. 5.95 - 6.70
Lindane, 25% formulation, dealers, dms., frt. alld. lb. 1.00 - 1.09
99%, tech., formulators, dms., frt. alld. lb. 2.65 - 3.25
Linden flowers with leaves, bls lb. .30 - —
without leaves, bls..... lb. .35 - —
Linseed meal, expeller, 32-34% bulk, Midwest, mills. ton. 60.50 - —
extracted, 36% bulk, same basis. ton. 53.50 - .54
Litharge, coml., powd., bbls., c.l., works, frt. equald. lb. .17½- .18
l.c.l., same basis.... lb. .18 - .19
Lithium benzoate, dms..... lb. 1.65 - 1.67
Bromide, NF, dms., works, frt. equald. lb. 2.30 - —
Carbonate, NF, dms., c.l., t.l., dlvd. lb. 1.29½- —
ton lots to t.l., dlvd... lb. 1.30 - —
tech., dms., c.l., t.l., dlvd., frt. alld., works. lb. .82 - 1.10½
l.c.l., same basis..... lb. .85 - 1.11½
Chloride, CP, anhyd., ton lots lb. 1.28½- —
tech., anhyd., dms., c.l., t.l., dlvd., or works, frt. alld. lb. 1.00 - 1.05
l.c.l., same basis..... lb. 1.05 - 1.05½
Citrate, NF, dms..... lb. 1.60 - 1.64
Fluoride, bbls., 10,000-lb. lots, dlvd. lb. 2.17½- —
ton lots, dlvd..... lb. 2.18½- —
less ton lots, dlvd..... lb. 2.23½- —
Hydride, powd., dms., 500-lb. lots, works. lb. 10.50 - 12.50
Hydroxide, monohydrate, dms., c.l., t.l., dlvd. or works, frt. alld.. lb. .80 - .80½
l.c.l., same basis..... lb. .81 - .81½
Manganate, dms., works..... lb. .95 - 1.15
Nitrate, tech., dms., 100-lb. lots. lb. 1.25 - —
Salicylate, dms..... lb. 1.60 - 1.70
Silicate, dms., works..... lb. 1.10 - 1.30
Stearate, dms., c.l., works.... lb. .47½- —
ton lots, works..... lb. .48½- —
less-ton lots, works..... lb. .53½- —
Sulfate, dms., 100-lb. lots..... lb. 1.45 - —
Titanate, dms., works..... lb. 1.15 - 1.35
Lithopone, ord., bgs., c.l., dlvd.. lb. .07½- —
l.c.l., dlvd..... lb. .08¼- .08½
titanated (high-strength), bgs., c.l., dlvd. lb. .10 - —
l.c.l., dlvd..... lb. .11 - —
Lithopone prices, Pacific Coast, 1c. per lb. higher.
Lobelia herb, bls..... lb. 1.50 - —
Lobeline sulfate, bots., works... oz. 37.50 - 39.00
Logwood extract, cryst., No. 1, bbls., l.c.l.. lb. .41 - —
No. 2, bbls., l.c.l..... lb. .39 - —
liq., No. 1, bbls., l.c.l..... lb. .20 - —
No. 2, bbls., l.c.l..... lb. .19 - —
No. 3, bbls., l.c.l..... lb. .18½- —
solid, No. 1, boxes, c.l..... lb. .35 - —
Lycopodium, cs..... lb. 1.20 - 2.00
dl-Lysine hydrochloride, bots.. kilo. 140.00 - 150.00

M

Mace, Siauw, siftings, bls..... lb. 2.15 - 2.40
West Indian, No. 1, bls. shipment.. lb. 2.75 - 2.99
Magnesia, calcined, tech., bgs., ctns., works. lb. .25¼- .26
syn. rubber grade, light, bgs., c.l., works.. lb. .29¼- —
extra light, bgs., works.. lb. .29¼- .30
l.c.l., works..... lb. .30 - —
USP, light, ctns..... lb. .35 - .36
heavy, bbls..... lb. .45 - .52
Magnesite, chemical grade, calcined, powd., bgs., c.l., works, frt. equald.. ton. 82.50 - —
dead-burnt, standard grain, bulk, c.l., Chawelah, Wash.. ton. 40.00 - —
Magnesium bromide, jars..... lb. .90 - 1.00
Carbonate, tech., bgs., c.l., frt. equald.. lb. .10¼- —
l.c.l., frt. equald..... lb. .12 - .13
truckloads, frt. equald. lb. .11 - —
Magnesium carbonate, USP, bgs., c.l., frt. equald.. lb. .12½- —
t.l., frt. equald..... lb. .13 - —
l.c.l., frt. equald..... lb. .14 - .15
Above prices are quoted f.o.b. works, freight equalized with metropolitan New York and competitive producing points.
Chloride, anhyd., 92% flake or pebble, dms., c.l., works. lb. .12¾- —
l.c.l., same basis.... lb. .14 - .15
hydrous, 99% flake, bgs., c.l., works.. ton. 50.00 - —
l.c.l., works..... ton. 55.00 - 105.00
Gluconate, dms., ens..... lb. 1.34 - 1.41
Hydroxide, NF, medicinal, bbls., dms., kgs lb. .26½- .30
Metal, 99.8% ingots, 10,000 lb. lots or more, works. lb. .34½- —
pigs, 10,000-lb. lots or more, works. lb. .33¾- —
sticks, cs., works, frt. alld. on carlots. lb. .56 - —
Magnesium oxide (see Magnesia, calcined).
Peroxide, 15%, dms., works.... lb. 1.00 - 1.05
Phosphate, tribasic, NF, bbls. lb. .75 - —
Silicate (see Talc).
Silicofluoride, dms., works .... lb. .10½- .12
Sulfate, tech., bgs., c.l., works 100 lbs. 2.15 - —
l.c.l., works..... 100 lbs. 2.90 - 3.15
USP, cryst., bgs., c.l., works. 100 lbs. 2.35 - —
l.c.l., 5,000 lbs., 1 withdrawal. 100 lbs. 3.10 - —
smaller lots..... 100 lbs. 3.35 - —
Magnesium trisilicate, USP, dms., 5,000-lb. lots. lb. .38 - —
1,000-lb. lots..... lb. .40 - —
100-lb. lots..... lb. .45 - —
Bulky and super grades of magnesium trisilicate, 7c. per lb. higher
Malathion, dms., c.l., works..... lb. .90 - —
l.c.l., works..... lb. .92 - 1.03
Maleic anhydride, dms., c.l., dlvd. E lb. .27 - —
l.c.l., dlvd. E..... lb. .28 - —



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WESTERN CONDENSING COMPANY

Appleton, Wisconsin

A WORLD-WIDE SUPPLIER OF HIGH-QUALITY MILK DERIVATIVES.

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McKESSON & ROBBINS, INC. CHEMICAL DIVISION

L. H. BUTCHER CO. (WEST COAST)

Maleic anhydride, tanks, dlvd. E lb. .26 - —
Prices on maleic anhydride W. of Rockies, 1½c. higher.
Mandrake root, bls lb. .55 - .60
Manganese acetate, bbls., dlvd lb. .35 - —
Arsenate, bgs lb. .16 - —
Borate, tech., fib. dms lb. .25 - —
Carbonate, bbls., works lb. .22 - —
Chloride, anhyd., dms., works lb. .25½- —
Dioxide, African 84-87%, 40,000 to 99,999-lb. lots, burlap paper lined, bgs., gross for net, works ton.102.00 - —
paper bgs., works ton.93.50 - —
dms., works ton.106.50 - —
Prices for manganese dioxide in 10,000 to 40,000-lb. lots $3 per ton higher.
Gluconate, dms. lb. 1.80 - 1.94
Hydrate, bbls., dlvd lb. .36 - —
Hypophosphite, NF, dms lb. 3.52 - —
Linoleate, liq., 4.35% Mn., dms., lb. .32½- —
solid, precip., 8.2% Mn. bbls lb. .37½- —
Naphthenate, liq., 6% Mn., dms., frt. alld lb. .27 - —
Resinate, fused, 3½% Mn. dms. lb. .24 - —
precip., 6½-7% Mn. dms lb. .28 - —
Sulfate, fertilizer grade, 65%, bgs., c.l., dlvd. S. E ton.80.50 - —
l.c.l., dlvd. S. E ton.87.50 - —
Tallate, 6%, dms lb. .24 - —
Mangrove bark, E. African, 38% tannin, c.l., ex dock ton.68.00 - —
So American 30% tannin, c.l., tannin, c.l., ex dock ton.55.00 -58.00
Mannitol, com'l, fib. dms., ton lots, works lb. .60 - —
dms. to ton lots, works lb. .62 - —
single dm., works lb. .65 - —
MBT (see 2-Mercaptobenzothiazole).
MBTS (see Mercaptobenzothiazyl disulfide).
Melamine, bgs., carlots, works lb. .30 - —
l.c.l., works lb. .31 - —
Menadione, USP, bots. gram .044 - .05
Menthol, nat., USP, Brazilian, cs lb. 6.30 - 6.40
syn., USP, racemic, cns lb. 4.95 - —
Menthyl salicylate, tins lb 4.00 - 4.25
2-Mercaptobenzothiazole, bgs., fib. dms., ton-lots, works, frt. alld lb. .40 - —
less ton lots, same basis lb. .42 - —
Mercaptobenzothiazyl disulfide, bgs., fib. dms., ton-lots, works, frt. alld lb. .50 - —
less ton lots, same basis lb. 52 - —
Mercuric chloride, NF, cryst., dms., 50-lb lots or more lb. 4.98 - —
gran., or powd., dms., 50-lb. lots or more lb. 4.78 - —
Cyanide, NF VIII, powd., fib. dms. lb. 6.84 - —
Iodide, red, NF, fib. dms lb. 7.72 - —
Oxide, red, NF, powd., fib. dms lb. 5.97 - 6.01
yellow, tech. (see Yellow, mercury oxide).
USP fib. dms lb. 6.14 - —
Mercurous chloride (see Calomel).
Iodide, yellow, NF lb. 7.72 - —
Mercury, ammoniated (see White precipitate, USP).
Metal, 76 lb. per flask, net-flask.268.00 -270.00
Mesityl oxide, dms., c.l., dlvd lb. .1350- —
l.c.l. dlvd. lb. .1450- —
tanks, dlvd. lb. .1150- —
Meta-aminophenol (see m-Aminophenol).
Metachloroaniline (see m-Chloroaniline).
Metanitroaniline (see m-Nitroaniline).
Metanitroparatoluidine (see m-Nitro-p-toluidine).
Metaphenylenediamine (see m-Phenylenediamine)
Metatoluidine (see m-Toluidine).
Metatolylenediamine (see 2,4-tolylenediamine).
Methanol, nat., denaturing grade, tanks, frt. alld gal. .75 - —
syn., Zone 1, dms., c.l., dlvd. or truckload min., frt. alld. gal. .45 - —
l.c.l., same basis gal. .51 - —
tankwagon, 2,000-4,000-gal. lots, dlvd. Metropolitan area gal. .33 - —
4,000 gal., min., frt. alld. or dlvd gal. .30 - —
4,000 gal., min., works, Carteret, Camden, N. J gal. .27½- —
Zone 2, dms., c.l., or truckload min. frt. alld. or dlvd gal. .48 - —
l.c.l., same basis gal. .54 - —
tankwagon, 2,000-4,000-gal. lots, min., dlvd. Metropolitan areas gal. .36 - —
tanks, 4,000 gal., min., frt. alld, or dlvd gal. .33 - —
Synthetic methanol zones are:—Zone 1 is all continental U. S. E. of eastern boundaries of Ariz., Idaho and Utah. Zone 2 is remainder of U S. west of above state boundaries comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.
Methenamine (see Hexamethylenetetramine).
dl-Methionine, fib. dms., frt. alld. 50-lb. or more lb. 3.50 - —
feed grade, 98%, fib. dms., same basis lb. 2.65 - —
Methoxychlor 50% wettable powder, dealers, dms., cs., frt. alld lb. .61 - .64
Methyl abietate, non-ret. dms., c.l., dlvd. zone 1 lb. .20½- —
t.c.l same basis lb. .21 - —
hydrogenated, non-ret. dms., c.l., dlvd. Zone 1 lb. .21 - —
t.c.l., same basis lb. .21½- —
Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio, Ky., Mich., Ind., Ill., Wis., St. Paul and Minneapolis, Minn.; St. Louis, Mo.; Miss., Ala., Ga., Fla., S. C. and Tenn.
Acetone, nat., dms., l.c.l., E. of Miss., frt. alld gal. .62½- —
syn., dms., c.l., frt. alld. E gal. .57 - —
t.c.l., frt. alld E gal. .63 - —
tanks, frt. alld E gal. .45 - —
Synthetic methyl acetone E. territory is all States East of and including Colo., Mont., N. Mex. and Wyo. West territory all states west of those four.
Acrylate, dms., c.l., t.l., dlvd. lb. .39 - —
t.t.l., dlvd lb. .40 - —
tanks, dlvd lb. .37 - —
Alcohol (see Methanol).
Amyl acetate, dms., c.l., dlvd. E. lb. .16 - —
l.c.l., dlvd. E lb. .17 - —
tanks, dlvd. E lb. .13½- —
Ketone, dms., works lb. 1.05 - —
Anthranilate, cns lb. 2.50 - 2.65
Benzoate, cns., dms lb. .53 - .65
Bromide, jobbers, cyls., various sizes, frt. alld. E lb. .47 - .61
Methyl cellulose, special vis. (1,500-4,000 cps.) 50-lb. bgs., c.l., works. lb. .78 - —
2,000-lb. lots and more, same basis lb. .65 - —
smaller lots, frt. alld. on 100 lbs. lb. .89 - 1.00
standard vis., (15,400 cps.). 50-lb. bgs., c.l., frt. alld lb. .66 - —
2,000-lb. lots and more, same basis lb. .72 - —
smaller lots, frt. alld. on 100 lbs lb. .75 - .85
Chloride, indust., cyls., frt. equald. lb. .21 - —
tanks, multi-unit, same basis. lb. .15 - —
single unit, same basis lb. .11½- —
refrigerator mfrs., cyls., dlvd lb. .46 - .48
other consumers or service men, cyls., dlvd lb. .67 - —
Chloroform (see 1,1,1-trichloroethane).
Cinnamate, cns. lb. 1.43 - 1.80
Cyclohexanol, dms., c.l., works lb. .35½- —
c.l. works lb. .36 - —
tanks, works lb. .34 - —
Ethyl ketone, dms., c.l., dlvd. lb. .14 - —
l.c.l., dlvd. lb. .15 - —
tanks, dlvd lb. .11½- —
Formate refd., dms lb. .35 - .40
tech., non-ret. dms., any quantity, works lb. .10 - —
Heptin carbonate, bots lb.33.00 -42.00
p-Hydroxybenzoate fib dms lb. 1.90 - 2.00
Ionone, standard, cns., dms. lb. 5.20 - 5.50
Isobutyl carbinol, dms., c.l., dlvd. lb. .16 - —
l.c.l., dlvd. lb. .17 - —
tanks, dlvd lb. .13½- —
Ketone, dms., c.l., dlvd lb. .16 - —
l.c.l., dlvd lb. .17 - —
tanks, dlvd lb. .13½- —
Methacrylate, dms., c.l., t.l., frt. equald. with Belle, W. Va. lb. .31 - —
smaller lots, same basis lb. .31½- —
tanks, same basis lb. .29 - —
Naphthyl ketone, cryst., cns lb. 3.00 - 4.30
Parahydroxybenzoate (see Methyl p-Hydroxybenzoate)
Roseaniline chloride, NF, fib. dms., 5-lb. lots lb. 5.64 - —
Salicylate USP cns. 500-lb. lots lb. .36 - —
Testosterone USP 100-gram bots. gram. .68 - —
2-Methylbenylamine, dms., l.c.l., works lb. 1.25 - —
2-Methylbenzyl dimethylamine, dms., c.l., works lb. 1.89 - —
l.c.l., works lb. 1.90 - —
2-Methyl-5-ethyl pyridine dms., c.s., works lb. .445 - —
l.c.l., works lb. .45 - —
tanks, works lb. .43 - —
Methylene blue, fib. dms., 100-lb. lots, frt. adjusted lb. 3.25 - 3.40
smaller lots, same basis lb. 3.40 - 3.55
Chloride, tech., dms., c.l., dlvd. E lb. .12½- —
l.c.l., same basis lb. .15 - —
tanks, same basis lb. .11¼- —
b-Methylnaphthalene, 32°C. m.p., dms., works lb. .90 - —
Methylpentanediol (see Hexylene glycol).
Methylphenylpyrazolone (see 1-Phenyl-3-methylpyrazolone-5)
Methylthionine chloride (see Methylene blue).
Mica, dry-grd., paint, plastic, 100 mesh, bgs. c.l., works lb. .04¼- —
roofing, 20 to 80 mesh, works lb. .03 - .04
wet-grd., biotite, bgs., c.l., works, frt. alld. E lb. .06¾- —
l.c.l., ex-whse. or frt. alld. E lb. .07½- —
paint or lacq., bgs., c.l., works, frt. alld lb. .08¼- —
l.c.l. ex-whse or frt. alld. E lb. .09 - —
rubber, bgs., c.l., works, frt. alld. E lb. .08 - —
l.c.l., ex-whse. or frt. alld. E lb. .09 - —
wallpaper, bgs., c.l., works, frt. alld., E lb. .08¼- —
l.c.l., ex-whse. or frt. alld. E lb. .08¾- —
white, extra, fine, bgs., c.l., works, frt. alld. E lb. .08¼- —
l.c.l. ex-whse or frt. alld. E lb. .09 - —
Mica, wet-grd. W. of Miss. ½c. higher; W of Rockies, 1c. higher.
Mineral spirits (see Petroleum mineral spirits).
Molasses, blackstrap feed grade, tanks, New Orleans gal. .13 - .13½
New York gal. .16 - —
Molybdenum (metal), powd., 80 or 200 mesh, ctns., works kilo. 2.20 - —
Trioxide, pure dms., works lb. 1.10 - —
tech., dms., works, basis Mo. content lb. 1.31 - —
Monobutylamine, dms., c.l., E. of Rockies lb. .55 - —
l.c.l., same basis lb. .56 - —
tanks, same basis lb. .53 - —
Monochlorobenzene, dms., c.l., frt. alld. or dlvd. E lb. .10 - —
l.c.l., same basis lb. .11 - —
tanks, same basis lb. .08½- —
Monoethanolamine, dms., c.l., dlvd. E lb. .27 - —
l.c.l., same basis lb. .28 - —
tanks, same basis lb. .25 - —
Monoethylalphanaphthylamine (see N-Ethyl-a-naphthylamine).
Monoethylamine, 70% contained amine, dms. c.l., dlvd. E lb. .35 - —
l.c.l., dlvd. E lb. .36 - —
tanks, dlvd. E lb. .33 - —
Monoethylaniline (see N-Ethylaniline).
Monoethylortholuidin (see N-Ethyl-o-toluidine).
Monoisopropanolamine, dms., c.l., dlvd. E lb. .27 - —
l.c.l., same basis lb. .28 - —
tanks, same basis lb. .25 - —
Monoisopropylamine, dms., c.l., dlvd. lb. .32 - —
l.c.l., same basis lb. .33 - —
tanks, same basis lb. .30 - —
Monomethylamine, 30-35% soln., dms., c.l., frt. equald, 100% basis. lb. .40 - —
l.c.l., frt. equald 100% basis. lb. .40½- —
tanks, frt. equald 100% basis. lb. .31 - —
40% soln., dms., c.l., frt. equald, 100% basis lb. .37 - —
l.c.l., frt. equald, 100% basis. lb. .37½- —
tanks, frt. equald, 100% basis. lb. .31 - —
Monosodium fluoroacetate (see Sodium fluoroacetate monobasic).
Mono-tertiary-butylmetacresol (see 6-tert-Butyl-m cresol)
Glutamate (see Sodium glutamate monobasic).
Phosphate (see Sodium phosphate monobasic).
Morphine, cns. oz.12.40 -12.60
Acetate, anhyd., cns. oz. 9.95 -10.00
Hydrobromide, cns oz. 9.90 - 9.95
Hydrochloride, NF, cns. oz. 9.90 - 9.95
Sulfate, USP, cns oz. 9.90 -10.05
Morpholine, dms., c.l., dlvd. E lb. .54¾- —
l.c.l., dlvd. E lb. .55¾- —
tanks, dlvd. E lb. .52¼- —
Musk, syn., ambrette, 100-lb. lots, fib. dms lb. 5.15 - —
25-lb. lots, cns lb. 5.20 - —
5-lb lots, cns lb. 5.30 - —
ketone, 100-lb. lots, fib. dms lb. 5.30 - —
25-lb lots cns lb. 5.35 - —
5-lb. lots, cns lb. 5.45 - —
xylol, 100-lb. lots, fib. dms lb. 1.40 - —
25-lb lots, cns lb. 1.45 - —
5-lb. lots, cns lb. 1.50 - —
Mustard seed, Danish, yellow, bgs lb. .10½- —
Dutch, bgs. lb. .10½- —
English, yellow, bgs lb. .10½- —
Montana, oriental, bgs lb. .09 - —
Myrobalans, J-1, assorted, bgs., ex dock ton.64.00 -65.00
crushed, bgs., ex dock ton.79.00 -80.00
Bombay, bgs., ex dock ton.63.00 -64.00
bgs., ex dock, plus duty lb. .10 - .10¼

N

Naphtha, painters (see Petroleum naphtha V. M. & P.).
Solvent (see S)
Naphthalene, crude, dom., 74°, tanks, frt. equald lb. .06¼- —
78°, bgs., c.l., same basis lb. .07½- .08
l.c.l., same basis lb. .07¾- .09¼
tanks, same basis lb. .07 —
imp., 78° large lots lb. .07 Nom.
refd., indust., chipped or crushed, bgs., frt. equald lb. .12½- —
tanks, same basis lb. .11¼- —
balls, flakes, wholesalers, jobbers, bbls., c.l., same basis, lb. .15½- —
cs., 50 lbs., c.l., same basis lb. .15¾- —
1-lb. pkgs., c.l., same basis lb. .18½- —
a-Naphthol, bbls., frt. alld lb. 1.00 - —
b-Naphthol, tech., flake, bbls., c.l., works lb. .33 - —
l.c.l., works lb. .35 - —
Benzoate, fib dms., works lb. 3.00 - —
custom contract, works lb. 1.65 - —
Salicylate dms lb. 5.00 - —
Sulfate, cns lb.35.00 - —
a-Naphthylamine, bbls., frt. alld lb .50 - —
b-Naphthylamine, tech., flake, bbls., works lb. 1.60 - —
Neocinchophen, USP, dms., frt. adjusted lb. 7.00 - 8.00
Neomycin, fib. dms., 1 kilo lots, basis, activity, gram. .45 - —
500-999 gram lots, basis, activity, gram. .50 - —
Nerolin, cns. lb. 2.15 - 2.65
Niacin (see Acid nicotinic).
Niacinamide (see Nicotinamide).
Nickel acetate, bbls. dlvd lb. .77 - .90½
Carbonate bbls. dlvd lb. .73¾- .81¾
Chloride, bbls. dlvd lb. .38½- .46½
Formate, bbls., ton lots, frt. alld lb. .68 - .69
Metal, electro cathodes, cs., works lb. .64½- —
Nitrate, bbls. works lb. .37 - .38
Oxide, black, bbls lb. .76 - —
green bbls. lb. .76 - —
Sulfate, bgs., c.l., dlvd lb. .30¼- —
l.c.l., dlvd lb. .31¼- .38¼
Nicotinamide, USP, dms., frt. adjusted kilo.12.00 -12.30
Hydrochloride dms. frt. adjusted kilo.11.50 -11.80
Nicotine sulfate, 40%, dealers, 50-lb. dms., frt. alld lb. 1.20 - —
manufacturers, 500-lb. dms., frt. alld. lb. 1.05 - —
Niger seed, bgs lb. .11 - .11½
Nikethamide, cbys lb. 7.50 - —
m-Nitroaniline, cryst., dms., frt. alld. lb. 1.15 - —
paste, 100% basis, dms., frt. alld. lb. 1.10 - —
o-Nitroaniline, flaked, 10,000 lbs. or more, dms. lb. .54 - —
less than 10,000 lbs lb. .57 - —
p-Nitroaniline, dms., frt. alld lb. .445 - —
Nitrobenzene, dbl. dist., dms., c.l., frt. alld. lb. .12 - —
l.c.l., frt. alld. lb. .13 - —
tanks, frt. alld. lb. .11 - —
Nitrocellulose, ester-soluble, 30-35 cps., ¼, ½, ¾, 5-6, 15-20, 30-40, 60-80, 125-175, secs., bbls., c.l., works lb. .34 - —
l.c.l., same basis lb. .35 - .37
18-25 cps., bbls., c.l., same basis lb. .36 - —
l.c.l., same basis lb. .37 - .39
250-400, 600-1,000 secs., bbls., c.l., same basis lb. .39 - —
l.c.l., same basis lb. .40 - .42
spirit-soluble, 30-35 cps., ¼, ½, secs., bbls., c.l., same basis lb. .41 - —
l.c.l., same basis lb. .42 - .44
5-6 cps., 40-60 secs, bbls., c.l., same basis lb. .40 - —
l.c.l., same basis lb. .41 - .43
Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable.
o-Nitrochlorobenzene, dms., c.l., frt. alld lb. .20 - —
l.c.l., same basis lb. .21 - —
tanks, same basis lb. .18 - —
p-Nitrochlorobenzene, dms. lb. .26 - .27
2-Nitro-4-chlorophenol, dms lb. .75 - —
Nitroethane, dms., c.l., dlvd. E lb. .24 - —
l.c.l., dlvd. E lb. .24¾- —
tanks, dlvd. E lb. .22½- —
Prices West of Rockies are 1c. higher.
Nitrogen solution, 37% N, tanks, frt. equald., per ton of product basis ton.47.50 - —
40.8% N, tanks, same basis ton.52.15 - —
Nitrogenous process tankage, bulk, works unit-ton. 3.00 - 4.00
Sewage sludge, bulk, works, unit-ton. 2.95 + .50
Nitromethane, dms., c.l., dlvd. E lb. .24 - —
l.c.l., dlvd. E lb. .24¾- —
tanks dlvd. E lb. .22½- —
Prices West of Rockies are 1c. higher.
a-Nitronaphthalene, bbls., frt. alld. lb. .41 - —
Nitropropane-1, and -2, dms., c.l., dlvd. E lb. .22½- —
l.c.l., dlvd. E lb. .23¼- —
tanks, dlvd. E lb. .21 - —
Prices West of Rockies are 1c. higher.
o-Nitrophenol, dms., works, frt. equald lb. .54 - —
p-Nitrophenol, dms., works, frt. equald lb. .50 - —
o-Nitrotoluene, dms., c.l., frt. alld. lb. .10 - —
l.c.l., frt. alld. lb. .11 - —
tanks, frt. alld. lb. .09 - —
p-Nitrotoluene, dms., works lb. .33 - —
m-Nitro-p-toluidine, dms lb. 1.50 - —
Nitrous ether, conc., bots 100-lb. lots lb. 1.28 - 1.38
Nonyl phenol, dms., c.l., frt. alld. lb. .26 - —
l.c.l. frt. alld. lb. .27 - —
tanks, frt. alld. lb. .24 - —
Nutgalls, Aleppo, bgs. lb. .36 - .38
Chinese, bgs. lb. No prices.
Nutmeg, East Indian, bgs. lb. .63 - .64
West Indian, bgs. lb. .63 - .64
Nux vomica, bls lb. .10 - .12
powd., bbls., bxs lb. .15 - .17

O

Octane, indust., tanks, Bayonne, N. J. gal. .19 - —
Baytown, Tex gal. .15¾- —
Borger, Tex gal. .15¾- —
1-Octanol, tech., dms., c.l., dlvd. lb. .35 - —
l.c.l., dlvd lb. .37 - —
tanks, dlvd lb. .32½- —
Octyl phenol, bgs., c.l., works lb. .23¼- —
l.c.l., works lb. .23¾- —
tanks, works lb. .22½- —
Drum prices for octyl phenol are 11c. higher.
(Essential oils prices listed below are f.o.b. New York, with differences between high and low quotations due to differences in quantity, quality or in individual suppliers, views.)
Oil, abies, siberica, cns lb. 3.00 - 3.50
Almond, artif., bitter (see Benzaldehyde).
nat., bitter, F.P.A., bots lb. 3.00 - 3.75
NF, bots. lb. 3.25 - 3.75
sweet, USP, dms., cns lb. 1.15 - —
Allspice (see Oil, pimento).
Amyris, dms. lb. 1.25 - —
Angelica root, bots lb.66.00 -100.00
seed bots lb.56.00 -95.00
Aniline (see A).
Anise, USP, dms lb. 3.50 - 4.00
Apricot, kernel, USP, dms lb. .48 - .55
Avocado, cns lb. 3.25 - —
Bay, NF, Puerto Rican, 50-55%, cns lb. 1.90 - 2.75
55-60%, cns. lb. 2.10 - 2.50
West Indian, 50-55%, cns., dms., lb. 1.85 - 2.40
Bergamot, nat., NF, Italian, cns. lb. 8.50 -11.00
Birchtar, crude, cns lb. 1.50 - 1.90
rectified, NF, cns lb. 1.75 - —
Bois de rose, Brazil, dms lb. 3.25 - 3.75
Mexican (see Oil, lignaloe wood).
Bone, dms., works lb. .65 - .70
Cajeput, native, cns lb. 1.75 - 3.30
redist., USP, cns lb. 2.25 - 3.40
Calamus, bots lb.12.00 -20.00
Camphor, sassafrassy, dms lb. .30 - .45
white, dms lb. 29 - —
Cananga, native, cns lb. 8.45 - —
rectified, cns lb.10.00 -13.00
Caraway, NF, cns lb. 3.50 - 5.00
Capsicum (see Capsicum oleoreson).
Cardamom, NF, bots lb.43.00 - —
Cassia, USP (see Oil, cinnamon, USP).
Castor, blown, dms., c.l lb. .2500- —
l.c.l. lb. .2600- —
dehydrated, bodied, dms., c.l lb. .2610- —
l.c.l. lb. .2710- —
tanks lb. .2410- —
unbodied, dms., c.l. lb. .2460- —
l.c.l. lb. .2560- —
tanks lb. .2260- —
hydrogenated, bgs., c.l., dlvd lb. .25¾- —
l.c.l., dlvd. lb. .31¾- —
No. 3, tech., dms., c.l. lb. .19¼- —
l.c.l. lb. .20¼- —
tanks lb. .17¼- —
No. 1, Brazilian, tanks lb. .18½- —
USP, dms., c.l. lb. — - —
l.c.l. lb. .2150- —
tanks lb. .1950- —
refd. and deodorized, dms., c.l. lb. — - —
l.c.l. lb. .28½- —
tanks lb. — - —
sulfonated, 50%, dms., works. lb. .13½- .14½
75%, dms., works lb. .17½- .18½
Cedarleaf, USP, XIII, cns., dms. lb. 3.15 - 3.90
Cedarwood, cns., dms lb. .65 - 1.00
Celery seed, bots lb.12.50 -20.00
Chamomile, blue, Hungarian, bots. lb.90.00 -180.00
Chenopodium, NF, cns lb. 3.65 - 3.90
Chinawood (see Oil, tung).
Cinnamon, bark, bots lb.25.00 -70.00
leaf, crude, dms lb. 1.50 - 2.00
USP, cns., dms. (Cassia) lb.10.25 -10.90
Citronella, Ceylon, cns., dms lb. .95 - —
Java, cns. lb. 1.95 - —
Java-type, cns lb. 2.00 - —
Clove, bud, USP, cns., dms lb. 2.65 - —
leaf, crude, dms lb. 1.20 - 1.50
Coconut, crude, tanks, N. Y lb. .13¾- —
Pac. Coast lb. .12¾- —
refd., Cochin type, dms., tax incl., l.c.l. lb. .20½- —
deodorized, tax incl., dms., l.c.l. lb. .22½- —
Cod, Newfoundland, dms lb. .12 Nom.
Codliver, USP, dms gal. 1.45 - 1.55
Copaiba, cns lb. 1.75 - 2.50
Coriander, USP, bots lb.13.00 -15.00
Corn, crude, tanks, works lb. .16 - —
foots (soapstock), acid 95%, tanks, N. Y. lb. .06¾- —
refd., salad, dms lb. .21¾- .22
tanks lb. .1947- —
Costus, bots oz. 8.00 - —
Cottonseed, crude, tanks, South East lb. .15¾- .15¾
Valley lb. .15⅞- .15¾
Texas lb. .15½- .15¾
foots (soapstock), acid 95%, tanks, N. Y. lb. .04¼ Nom.
refd., salad, dms lb. .21¾- .22
tanks lb. .19⅝- —
Creosote (see Creosote, coaltar).
Cubeb, cns. lb. 4.10 - 4.25
Cumin, bots., cns lb. 5.00 - 5.75
Cypress, bots lb. 5.30 - —
Degras (see D).
Dillseed, bots lb. 2.80 - 4.25
Dillweed, dom., bots., dms lb. 3.10 - 3.50
Dip (see D)
Erigeron, cns lb. 5.50 - 7.50
Eucalyptus, NF, rectified, 70-80%, dms lb. .70 - 1.05
80-90%, dms lb. .78 - 1.10
Fennel, sweet, USP, cns lb. 2.80 - —
Fir, Canada, cns lb. 2.50 - 3.25
Fish, refd., alkali, dms lb. .1500- .1550
kettle-bodied, dms lb. .1730- .1780
light-pressed, dms lb. .1350- .1400
tanks lb. .1200- —
Fishliver, crude, for feeds or concentrating 4,000 to 12,000 A units per gram, dms., 1,000,000 units. .08 - .09
10,000 to 20,000 A units per gram, dms., 1,000,000 units. .09 - .10
25,000 to 35,000 A units per gram, dms., 1,000,000 units. .09 - .10
40,000 to 55,000 A units per gram, dms., 1,000,000 units. .10½- .11
100,000 A units per gram, dms. 1,000,000 units. .14 - —
200,000 A units per gram, dms. 1,000,000 units. .15½- —
500,000 A units per gram, dms. 1,000,000 units. .16 - —
Prices above are based on the USP XIV method of conversion, Morton Stubbs Corrected E x 1900.
Fusel (see F).
Garlic, pure, bots oz. 4.75 - 9.50
Gaultheria (see Oil, wintergreen).
Geranium, Algerian, cns lb.12.75 -14.25
Bourbon, cns lb.13.50 -14.00
Turkish (see Oil palmarosa).
Grapefruit, dms lb. 1.70 - 3.25

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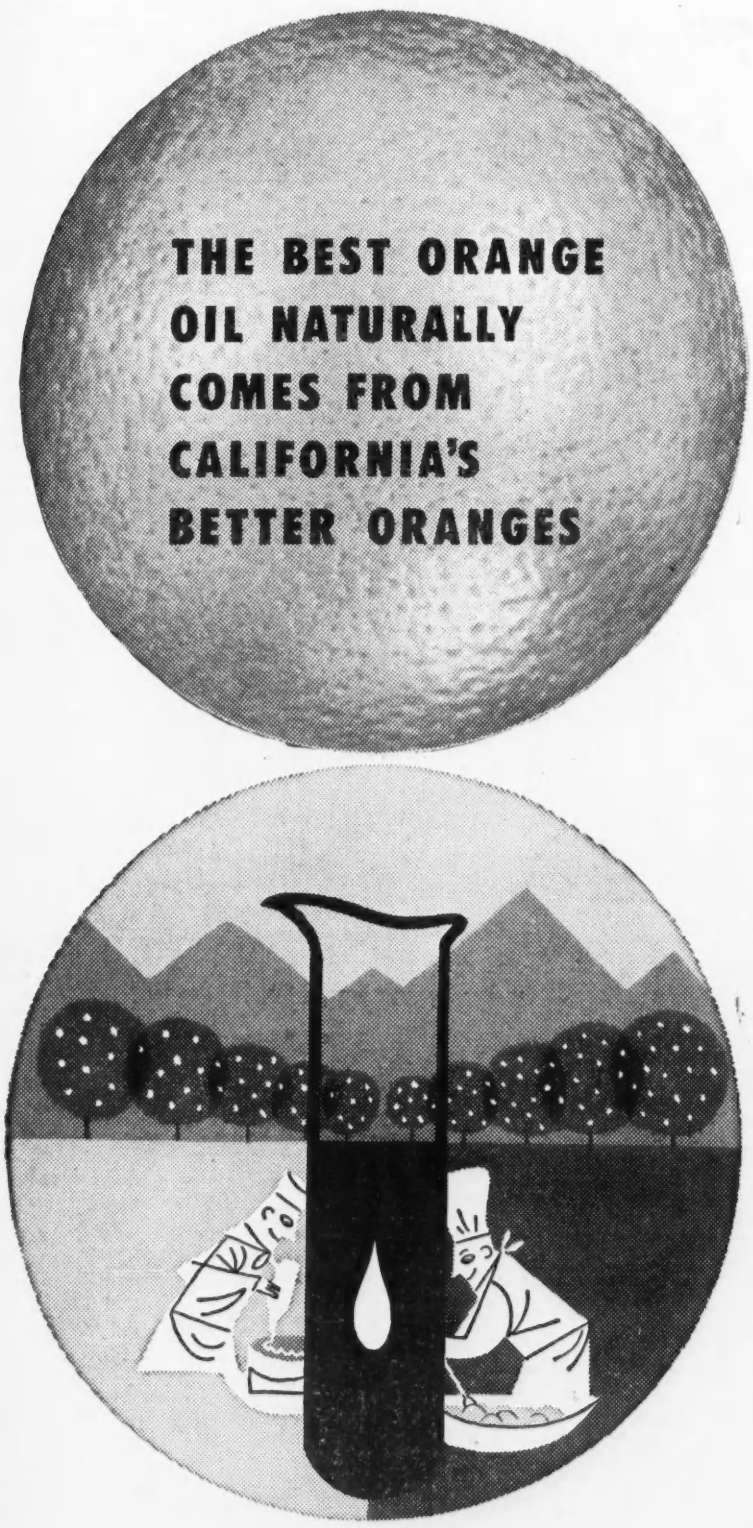
Oil, grease, No. 1, dms., c.l. lb. .15¼- —
dms., l.c.l. lb. .16¼- .18¼
extra, winter, strained, dms lb. .17¼- —
dms., l.c.l. lb. .18¼- .20¼
prime, burning, dms lb. .18¾- —
dms., l.c.l. lb. .19¾- .21¼
Guaiacwood, cns. lb. 1.65 - —
Hemlock cns. lb 2.10 2.50
Juniper berry, NF, VIII, bots lb. 2.75 - 4.00
twice rectified, bots lb. 3.60 - 7.00
Tar, NF (see Juniper tar).
Wood, tech., cns. lb. .38 - .55
Lard (see Oil, grease).
Laurel leaf, dms., cns lb. 9.75 -12.50
Lavandin, dms., cns lb. 2.35 - 2.85
Lavender, flower, USP, French
35-37% ester, cns lb. 2.85 - 4.60
38-40% ester, cns lb. 8.50 - 9.50
40-42% ester, cns lb. 8.75 - —
spike, Spanish, cns lb. 1.85 - 2.30
Lemon, USP, Calif., cns., dms lb. 4.75 - 6.00
Messina, cns lb. 5.50 - —
terpeneless, bots. lb.50.00 -85.00
Lemongrass, cns., dms lb. 2.25 - —
Lignaloe wood, Mex., cns lb. 4.65 - —
Lime, dist., Mexican, cns lb. 3.50 - 3.75
West Indian, cs lb. 3.50 - 3.75
expressed, West Indian, cns lb. 6.00 - 8.00
terpeneless, bots. lb.29.50 -100.00
Linseed, raw, dms., c.l., N. Y. lb. .1930- —
l.c.l. lb. .2030- .2080
tanks (f.o.b. Minneapolis) lb. .1600- —
New York lb. .1730- —
tankwagon New York lb. .1770- .1780
Boiled linseed oil, .006c. per lb. higher.
Mace, dist. cns., dms lb. 4.75 - —
Mandarin (see Oil, tangerine).
Oil, menhaden, crude, new crop, tanks, works, Atlantic & Gulf. lb. .09 - .09¼
Mineral, white (see Oil, white mineral).
Mirbane (see Nitrobenzene).
Mustard seed, nat., dms lb. .17 - .17½
syn., bots lb. 1.60 - 1.85
Neatsfoot, 15° cold test, dms lb. .30 - .33
20° cold test, dms lb. .29 - .32
30° cold test, dms lb. .28 - .31
Neroli, NF, French, bots lb.400.00 - —
Spanish, bots lb.32.50 -75.00
Nutmeg, USP, dist., East Indian, cns., dms lb. 4.85 - 5.25
West Indian, cns., dms lb. 4.85 - 5.25
Ocotea cymbarum, dms lb. .50 - .60
Oiticica, liq., dms lb. .17 - .17½
tanks lb. .15½- —
Oleo, extra, dms lb. .17 - .17½
Olibanum, bots lb. 5.50 - 7.65
extra fine, bots lb. 8.00 - 9.00
Olive, edible, Spanish, dms., duty paid gal. 3.60 - 3.75
Orange, sweet, dist., cns. lb. .45 - .80
expressed, USP, Brazilian, cns., dms lb. No stocks.
Calif., cns., dms. lb. .55 - 1.25
Florida, cns., dms lb. .45 - .50
Messina, cns. lb. 3.85 - 5.85
West Indian, cns., dms lb. 2.50 - 3.65
sesquiterpeneless, bots. lb.65.00 -120.00
Origanum, Spanish, cns lb. 2.00 - —
Palm, clarif., dms lb. .1610- .1710
Palmarosa, cns lb. 8.25 -10.00
Paraffin, pale, 100-110 vis., at 100° F, tanks, East Coast refy gal. .14 - —
Patchouli, dms. lb. 6.50 - 8.75
Oil, peach kernel, USP (see Oil apricot kernel).
Peanut, crude, tanks, f.o.b. mills. lb. .16 bid
refd., dms. lb. .21¾- .22½
tanks lb. .19¾ bid
Pennyroyal, USP, imported, cns. lb. 2.75 - 3.50
Peppermint, nat., dms lb. 5.75 - —
redist., USP, dms lb. 5.65 - 8.50
Persic, USP (see Oil, apricot kernel).
Petitgrain, South American, cns., dms lb. 3.40 - 3.50
Pimento, berry, NF, dms lb. 4.50 - 5.00
leaf, cns. lb. 2.65 - 3.10
Pine, dest.-dist., dms., l.c.l., works, lb. .12¼- —
ex-whse. lb. .14¼- —
steam-dist.,, dms., ex whse, N.Y.C lb. .163 - —
Pineneedle, Siberian (see Oil, abies siberica).
Rapeseed, tankcars lb. .18¾- —
Red (see Acid, oleic).
Rice, bran, clarif., dms., l.c.l. lb. .18 Nom.
tanks, dlvd. E lb. .16 Nom.
Rose, nat., Bulgarian, bots oz.43.00 -57.00
Rosemary, Spanish, USP, cns., dms lb. .60 - 1.00
tech., cns., dms lb. .50 - .70
Rue, bots. lb. 2.00 - 2.50
Safflower, dms., c.l., Atl. coast lb. .1900- —
tanks, same basis lb. .1750- —
Sage, clary, bots lb.18.75 -19.00
Dalmatian, cns lb. 4.25 - 6.00
Spanish, cns. lb. 1.20 - 1.45
Sandalwood, NF, cns lb.14.25 -15.80
Sardine, crude, tanks, Pac. coast.. lb. .08½- .09
Sassafras, artif., dms lb. .49 - .60
nat., dom., USP, dms lb. 1.45 - 2.10
imp., Brazilian (see Oil ocotea cymbarum).
Savin, cns lb. 2.75 - —
Oil, savory, cns lb. 4.25 - —
Sesame, refd., dms lb. .38 - .39
Shingle stain, tar distillate, dms., c.l., works gal. .35 - —
l.c.l., works gal. .44 - —
tanks, works gal. .23 - —
Snakeroot, Canada, cns lb.27.50 -31.00
Soybean, crude, tanks, Decatur, lb. .15⅜- —
foots soapstock, acid, 95% tanks, N. Y. lb. .07⅝- —
refd., alkali, dms lb. .2017- .2057
tanks lb. .1817- —
clarified, dms. lb. .1967- .2007
tanks lb. .1767- —
salad, dms. lb. .2047- .2100
tanks lb. .1847- —
Sperm, bleached winter, 45° dms. lb. .1675- .1725
tankcars lb. .1500- —
nat., winter, 45°, dms lb. .1575- .1625
tankcars lb. .1400- —
Spruce, cns., dms lb. 2.10 - 2.75
Sweet birch, USP, Northern, cns. lb. 4.25 - 9.50
Southern, cns lb. 2.50 - 3.00
Tall, crude, dms., c.l., works lb. .03¾- .04¼
tanks, works lb. .02½- .03
dist., dms., c.l., works lb. .07½- —
l.c.l., works lb. .07¾- —
tanks, works lb. .06¼- —
refd., dms., c.l., works lb. .06½- .06¾
l.c.l., works lb. .06¾- .07¾
tanks, works lb. .05¼- .05¾
Tallow, acidless, dms., c.l. lb. .13½- —
dms., l.c.l. lb. .14½- .16
Tangerine, Floridian, dms lb. 2.00 - 2.80
Tansy, dms lb. 7.50 - 8.40
Tar acid (see T's).
Pine, coml., dms., c.l., works lb. .0561- —
l.c.l., works lb. .0634- —
whse lb. .0745- —
tanks, works lb. .046 - —
rectified, NF, dms., incl., l.c.l., works, South gal. 1.05 - —
ex whse., N. Y. C gal. 1.15 - —
refined, dms., works, l.c.l., incl. gal. .92 - —
N. Y. whse., l.c.l. gal. 1.02 - —
Theobroma (see Cocoa butter).
Thyme, NF, red, cns., dms lb. 1.80 - 2.00
white, cns lb. 1.95 - 4.00
tech., white, cns lb. .40 - 1.85
Tung, dms., c.l., N. Y. lb. .25¾- —
l.c.l., same basis lb. .26¼- .2 ½
tanks, N. Y. lb. .24¼- —
domestic mills lb. .23¼ Nom.
Turkey red (see Oil, castor, sulfonated).
Turpentine, NF, cns., dms. lb. .28 .45
Vetiver, Bourbon, cns lb.13.00 -15.75
Haitian, cns. lb. 9.80 -11.75
Java, cns lb.18.50 -20.00
Wheat, germ, 5-gal, dms gal.11.20 - —
White, mineral, tech., 50-65 vis., non-ret. dms. c.l., f.o.b. N. Y. gal. .51½- .54¼
65-75 vis., non-ret., dms., c.l., same basis gal. 52½- .55
l.c.l., same basis gal. .57½- .58¼
80 90 vis., non-ret., dms., c.l., same basis gal. .53½- .56¼
t.c.l., same basis gal. .58½- .59¼
135-138 vis., non-ret. dms., c.l., same basis gal. .59½- .62½
t.c.l., same basis gal. .64½- .65¼
145-155 vis., non-ret. dms., c.l., same basis gal. .66 - .69½
t.c.l., same basis gal. .71 - .71½
175-185 vis., non-ret. dms., c.l., same basis gal. .69½- .73
t.c.l., same basis gal. .74½- .75
USP, 200-210 vis., non-ret., dms., c.l., same basis gal. .73½- .75
t.c.l., same basis gal. .77½- .78
345-355 vis., non-ret. dms., c.l., same basis gal. .77 - .80
t.c.l., same basis gal. .83 - .85
Wintergreen, USP, nat., Northern, cns. lb. 6.35 -10.30
Southern cns lb. 3.20 -19.50
syn. (see Methyl salicylate).
Wood (see Oil, tung).
Wormseed (see Oil, Chenopodium, NF).
Wormwood, cns. lb. 5.00 - 6.85
Ylang-ylang, Bourbon, bots lb.17.00 -30.00
extra, bots lb.28.00 -40.00
Madagascar, bots lb. No stocks
Oleostearine, bbls. lb. .13½- .14
Opium, USP, cns oz.19.20 -19.45
gran., USP, cns oz.21.65 -21.90
powd., USP, cns oz.21.65 -21.90
Orange cadmium-selenide lithopone, light shade, bbls., frt. alld. E. of Rockies lb. 1.80 - —
Deep shade, bbls lb. 2.00 - —
Cadmium-Mercury lithopone, deep shade, bbls lb. 1.78 - —
Chrome, CP, bbls., dlvd. N. of Tennessee and N.C., E. of Miss. R., include Davenport, Tenn., and E. of Minneapolis, Rock Island, St. Louis, St. Paul lb. .33 - .33⅛
Chrome orange prices are ½c. higher, dlvd. Ala., Fla., Ga., La. (Shreveport); 1½c. Miss., N. C., S. C., Tenn., Dallas and Ft. Worth, Tex., El Paso, Tex.; 2c. Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1.6c. higher dlvd. Pac. Coast for Denver, Pueblo, Salt Lake City. Wichita prices are equalized with Chicago.
Dinitroaniline toner, CP lb. 1.45 - —
Mineral, American, bbls., l.c.l., works lb. .2160- —
Molybdated, bbls. lb. .46 - .46¼
o-Nitroaniline toner, kegs. lb. 1.15 - —
Orange peel, bitter, Haitian, bls. lb. .14 - .16
sweet, bls. lb. .16 - .18
Orris root, Florentine, bls. lb. .45 - .50
powd., bbls., bxs. lb. .50 - .53
Verona, bls. lb. .35 - .40
powd., bbls., bxs. lb. .40 - .45
Orthoaminobiphenyl (see o-Aminobiphenyl)
Orthoanisidin (see o-Anisidine).
Orthochloroanilin (see o-Chloroaniline).
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde).
Orthochloroparanitroanilin (see 2-Chloro-4-nitroaniline).
Orthochlorophenol (see o-Chlorophenol).
Orthocresol (see o-Cresol).
Orthodichlorobenzene (see o-Dichlorobenzene).
Orthonitroanilin (see o-Nitroaniline).
Orthonitrochlorobenzene (see o-Nitrochlorobenzene).
Orthonitrobiphenyl (see o-Nitrobiphenyl).
Orthonitroparachlorophenol (see 2-Nitro-4-chlorophenol).
Orthonitrophenol (see o-Nitrophenol).
Orthonitrotoluene (see o-Nitrotoluene).
Orthophenetidin (see o-Phenetidine).
Orthophenylphenol (see o-Phenyl phenol).
Ortho-tertiary-amylphenol (see o-tert-Amylphenol).
Orthotolidin (see o-Tolidine base).
Orthotoluidin (see o-Toluidine).
Osage, orange, cryst., No. 1, bbls. l.c.l. lb. .40 - —
extract, liq., No. 1, bbls., l.c.l., lb. .19 - —
Ouabain, USP, bots gram. 3.00 - 4.00
Oxyquinolin sulfate, cns., 100-lb. lots, works lb.4.75 - 5.00
smaller lots, works lb. 4.92 - 5.17



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Flavor is the most important factor in your finished product. Better *orange* flavor naturally comes from *better oranges*, and all tests prove California oranges are richer in flavor strength, more intense in aromatic constituents.

Wherever you use Oil of Orange, be sure your supplier provides Exchange Brand California Oil of Orange. No other oil of orange has the world-wide reputation of Exchange Brand, produced by the people who know citrus best—the Sunkist Growers of California.

Flavor is one of your least expensive ingredients. Doesn't it seem foolish to settle for cheaper, inferior orange oil when flavor is so important yet costs so little? Ask your supplier for Exchange Brand Oil of Orange, with its consistent year-after-year quality and its richer orange flavor.

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Sunkist Growers

Products Department • Ontario, California

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Dodge & Olcott, Inc., 180 Varick St.
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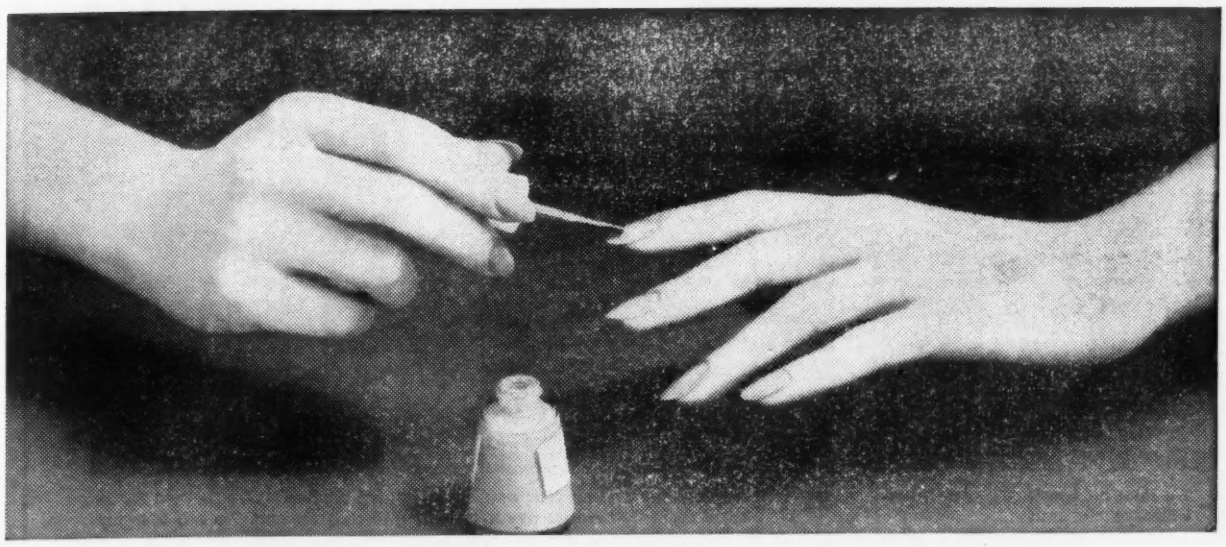
Fritzsche Brothers, Inc., 76 Ninth Ave.
New York 11, N.Y.
Ungerer & Company, Inc.
161 Avenue of the Americas
New York 13, N.Y.

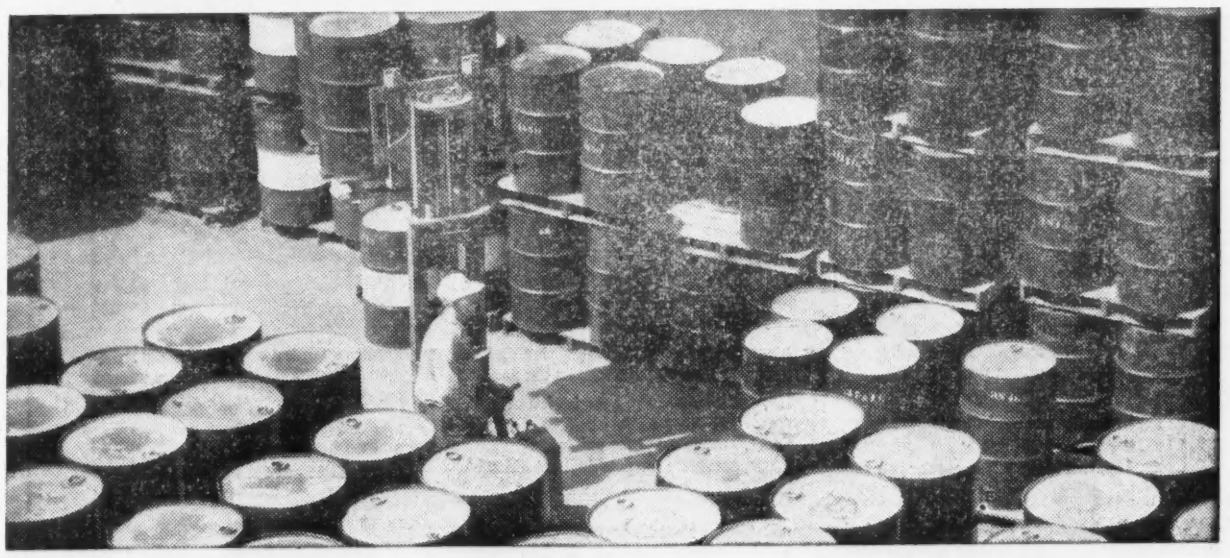
Inquiries from countries other than the U.S. and Canada should be directed to the Products Department, Sunkist Growers.

P

Papain, USP, African, bots.....lb. 3.50 - 4.00
Ceylon .....lb. 3.00 - 3.50
Papaverine, nat. or syn. hydrochloride, USP, cns., 25-oz. to 100-oz. lots..oz. 5.00 - —
smaller lots .....oz. 5.05 - 5.20
Sulfate, cns. .....oz. 7.10 - 7.35
Paprika, Roumanian, bgs.....lb. .26 - —
Spanish, bgs. .....lb. .34 - —
Yugoslavian, bgs. .....lb. .33 - —
Para-aminophenol (see p-Aminophenol).
Para-anisidin (see p-Anisidine).
Parachloranilin (see p-Chloraniline).
Parachloro-orthonitroanilin (see 4-Chloro-2 nitroaniline).
Parachlorobenzaldehyde (see p-Chlorobenzaldehyde).
Parachlorophenol (see p-Chlorophenol).
Paracresol (see p-Cresol).
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).
Paraffin, crude, scale, white, 123°-127°F, ASTM, solid, c.l., refy. lb. .0750- —
fully refd., 122°-124°F, ASTM, c.l., refy. lb. .0905- —
125°-127°F, ASTM, slabs, loose, c.l., refy. lb. .0905- —
130°-132°F, ASTM, slabs, loose, c.l., refy. lb. .0905- —
132°-134°F, ASTM, c.l., refy. lb. .0905- —
135°-137°F, ASTM, slabs, loose, c.l., refy. lb. .0905- —
Prices for paraffin in bags and ctns., c.l., 7/10c. per lb. higher; 1.000 to 9.999 lbs., 2.7c. per lb. higher and under 1,000 lbs. 3.7c. per lb. higher.
AMP temperatures are an arbitrary 3°F higher than ASTM.
Paraformaldehyde, 91%, flake, bgs., c.l., frt. alld. lb. .1075- —
l.c.l., frt. alld. .....lb. .1275- .1375
powd., bgs., c.l., frt. alld. lb. .15½- —
l.c.l., frt. alld. .....lb. .17 - —
USP, X, fib. dms., c.l. .....lb. .183 - —
1,000-lb. lots .....lb. .193 - —
smaller lots .....lb. .208 - —
Paraldehyde, tech., 98%, 55-gal. dms., c.l., works lb. .13½- —
l.c.l., works .....lb. .14½- —
tanks, works .....lb. .11½- —
Paranitroanilin (see p-Nitroaniline).
Paranitrochlorobenzene (see p-Nitrochlorobenzene).
Paranitrotoluene (see p-Nitrotoluene).
Paranitrophenol (see p-Nitrophenol).
Paraphenetidin (see p-Phenetidine).
Paraphenylenediamine (see p-Phenylenediamine).
Paraphenylphenol (see p-Phenylphenol).
Para-tertiary-amylphenol (see p-tert-Amylphenol).
Para-tertiary butylphenol (see p-tert-Butylphenol).
Parathion, spray powder, 15%, dealers, dms., bgs., frt. alld. lb. .50 - .53
tech., dms., c.l., t.l., works....lb. 1.3395- —
l.c.l., works .....lb. 1.51 - —
Paratoluenesulphonamide (see p-Toluenesulfonamide).
Paris green, dealer, dms., c.l., frt. alld. lb. .44 - .47
l.c.l., same basis .....lb. .45 - .48
Passion flower herb, bls.....lb. .20 - .21
Peanut meal, 45%, old process, bgs., mills..ton 62.00 - —
Pectin, citrus, NF, powd., bbls..lb. 2.05 - 2.06
tech., powd., bbls. .....lb. 1.25 - —
imported, Danish, ex whse....lb. 1.28 - —
Penicillin, crystalline, potassium, sterile, bulk, 1,000,000 units. .0475- .0520
Procaine, bulk....1,000,000 units. .0475- .0520
Sodium, sterile, bulk, 1,000,000 units. .0475- .0520
Pentachlorophenol, dms., c.l., t.l., works, frt. equald..lb. .21 - —
l.c.l., same basis .....lb. .22½- .29
Pentaerythrital, tech., bgs., c.l., works..lb. .32 - —
l.c.l., works .....lb. .33 - —
Di- and tri-isomers (see Dipentaerythritol and Tripentaerythritol).
Pentane, indust., tanks., Tex. refy. gal. .13 - —
Pepper, black, Malabar, spot, bgs lb. .28 - —
red, Gondar, spot, bgs.....lb. No prices.
Japanese, hontaka, bgs.....lb. .33 - .34
birdseyes, bgs., new crop..lb. No prices.
Mombasa, bgs., shipt.....lb. .65 - —
Nigerian, bgs. .....lb. .29½- —
Turkish, bgs. .....lb. .28 - —
white, bgs. .....lb. .33 - .33½
Peppermint leaves, USP, dom., bls., dms..lb. .70 - .75
imp., bls. .....lb. 1.10 - —
Perchloroethylene, dms., c.l., or truckloads, dlvd. E..lb. .12½- —
l.c.l., dlvd. E. .....lb. .14 - —
tanktruck, 1,000 gal., min. dlvd. E. lb. .11½- —
tanks, dlvd. E. .....lb. .11 - —
dlvd. W. .....lb. .11½- —
Peru balsam, dms. .....lb. 1.50 - 1.75
Petrolatum, amber, dms., c.l., refy. lb. .06 - .06¾
l.c.l., dlvd. .....lb. .07⅝- .08
tanks, refy. .....lb. .08¼- .05⅛
cream, dms., c.l., refy.....lb. .07⅛- .08⅛
l.c.l., dlvd. .....lb. .09½- .09¾
tanks, refy. .....lb. .05⅝- .06⅝
extra amber, dms., c.l., refy..lb. .06¼- .06⅞
l.c.l., dlvd. .....lb. .08 - .08¼
tanks, refy. .....lb. .04½- .05⅝
USP, white, lily, dms., c.l., refy. lb. .07⅝- .08¼
l.c.l., dlvd. .....lb. .09⅞- .10⅛
tanks, refy. .....lb. .05⅞- .07
snow, dms., c.l., refy.....lb. .08½- .08¾
l.c.l., dlvd. .....lb. .10¾- .10⅝
tanks, refy. .....lb. .06⅜- .06⅞
soft, dms., c.l., refy.....lb. .07¾- .08¾
l.c.l., dlvd. .....lb. .09½- .09¾
tanks, refy. .....lb. .05¼- .06⅞
yellow, soft, dms., c.l., refy..lb. .06¼- .06¾
l.c.l., dlvd. .....lb. .07⅞- .08⅛
tanks, refy. .....lb. .04½- .06⅞
Petroleum, lacquer diluent, 150°-240°F, b.r., tanks, West Coast, ex tax, Los Angeles. gal. .169 - .204
East coast, N. J., N. Y. ..gal. .19 - —
Group 3, benzol-type...gal. .14125- .14625
toluol-tyoe .....gal. .13125- .13375
Mineral spirits, reg., tanks, Calif., ex tax, San Francisco gal. .164 - —
East coast, N.J., N.Y.gal. .17 - —
Group 3 .....gal. .11875- —
tankwagon, Boston.....gal. .19 - —
Buffalo .....gal. .195 - —
Chicago .....gal. .279 - —
Cleveland .....gal. .22 - —
Newark .....gal. .18 - —
New York .....gal. .18 - —
Philadelphia .....gal. .185 - —
Pittsburgh .....gal. .18 - —
Providence .....gal. .195 - —
Petroleum, mineral spirits, odorless, tanks, refy., Watson, Cal..gal. .245 - —
Borger, Tex. .....gal. .24 - —
Houston, Tex. .....gal. .24 - —
Wood River, Ill. .....gal. .2625- —
dlvd. N. J. .....gal. .32 - —
dlvd. N. Y. .....gal. .33½- —
tankwagon, N. J., dlvd..gal. .36 - —
N. Y., dlvd. .....gal. .37 - —
Petroleum naphtha, cleaners', tanks, East Coast, N. J., and N. Y..gal. .17 - —
Group 3 .....gal. .12875- —
tankwagon, Newark .....gal. .18 - —
New York .....gal. .18 - —
Philadelphia .....gal. .185 - —
High solvency (see Petroleum solvent, partial aromatic).
VM&P, 225°-300°F., b.r., tanks, West Coast, Los Angeles..gal. .169 - —
Portland, Ore..gal. .175 - —
San Francisco..gal. .174 - —
Seattle, Wash..gal. .175 - —
East Coast, N. J. and N. Y. gal. .18 - —
Group 3 .....gal. .12875- —
tankwagon, Boston.....gal. .205 - —
Chicago .....gal. .289 - —
Cleveland .....gal. .23 - —
Newark .....gal. .195 - —
New York.....gal. .195 - —
Philadelphia .....gal. .20 - —
Pittsburgh .....gal. .19 - —
Solvent, partial aromatic, tanks, 205°-282°F., b.r., 41°C., m.a.p., N. Y., N. J gal. .245 - —
212°-278°F. b.r. 43°C. m.a.p., N. J gal. .26 - —
212°-284°F. b.r., 19°C. m.a.p., N. J gal. .29 - —
224°-280°F., b.r., 48°C. m.p.a., Houston gal. .215 - —
273°-361°F. b.r., 29°C. m.a.p., N. J gal. .29 - —
282°-325°F. b.r., 41.5°C. m.a.p. Houston gal. .25 - —
287°386°F., b.r., 31°C., m.a.p., N. J.. gal. .29 - —
Petroleum solvent, partial aromatic, tanks, 310°-344°F., b.r., 13.5°C. m.a.p., Texas City gal. .33 - —
310°-348°, b.r., 17°C., m.a.p., N. Y., N. J gal. .35 - —
320°-360°F., b.r., 16°C., m.a.p., N. Y., N. J gal. .33 - —
324°-349°F, 37°C., m.a.p., Houston gal. .33 - —
341°-390°F., b.r., 35°C., m.a.p., N. J gal. .27 - —
352°-413°F., b.r., 30°C., m.a.p. Houston gal. .33 - —
358°-401°F., b.r., 25°C., m.a.p., N. Y., N. J. ... gal. .39 - —
364°-404°F b.r., 19°C. m.a.p., N. Y., N. J gal. .425 - —
367°-418°F. b.r., 19.6°C. m.a.p., N. Y., N. J gal. .33 - —
rubber, tanks, Cal., ex tax, San Francisco gal. .173 - —
East Coast, N. J., N. Y., gal. .18 - —
Group 3 ... gal. 12875- —
Stoddard, tanks, East Coast, N. J., N. Y gal. .17 - —
Group 3 gal. 12375- —
Pennsylvania, western gal. .15 - —
Boston ..... gal. .19 - —
Chicago ..... gal. .289 - —
Cleveland ..... gal. .22 - —
Los Angeles, ex tax .. gal. .194 - —
Newark ..... gal. .18 - —
New York ..... gal. .18 - —
Philadelphia ..... gal. .185 - —
Pittsburgh ..... gal. .18 - —
Petroleum sulfonate, oil soluble, 60-62% sulfonic content, non-ret. dms., c.l., work lb. .16½- .18¾
l.c.l., works ..... lb. .17½- .19
tanks, works ..... lb. .14½- .17
50-55% sulfonic content, non-ret. dms., c.l., works lb. .16 —
l.c.l., works ..... lb. .17 - —
tanks, works ..... lb. .13 - —
o-Phenetidine, dms., works .. lb 1.00 - —
p-Phenetidine, dms., works .. lb 1.00 - —
Phenobarbital, USP, dms., 100-lb. lots lb 3.50 - —
Phenobarbital-sodium, USP, dms., 100-lb. lots lb 3.50 - —
Phenol, 90-92% (cresol 8-10%), non-ret. dms. c.l. frt alld E. of Rockies lb. .16¾- —
l.c.l., same basis .. lb. .17½- —
tanks, same basis .. lb. .15 - —
82-84% (cresol 16-18%), non-ret. dms., c.l., same basis lb. .16¼- —
l.c.l., same basis .. lb. .17 - —
tanks, same basis ..... lb. .14½- —
39°C or above, tar distilled, non-ret. dms., c.l., same basis. lb. .18¼- —
l.c.l., same oasis .. lb. .19 - —
tanks, same basis ..... lb. .16½- —
USP, syn., dms., c.l., frt. alld lb. .18¾- —
1,000-lb. lots or more, same basis lb. .19½- —
less than 1,000-lb. lots, same basis lb. .20½- —
tanks, same basis ..... lb. .17 - —



your **POLISH** by the bottle



or your **PAINT** by the barrel

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Enjay Ketones and Solvents meet the most rigid specifications of the surface coating industry. Active solvents of the highest quality, they help guarantee top performance from enamels, lacquers, paints, and removers for all three.
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Enjay offers a diversified line of Petrochemicals for industry: KETONES AND SOLVENTS (Methyl Ethyl Ketone, Acetone, Isopropyl Acetate, Secondary Butyl Acetate); and a varied line of LOWER ALCOHOLS, HIGHER OXO ALCOHOLS, AROMATICS, OLEFINS AND DIOLEFINS.

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Phenolphthalein, USP or yellow, bbls., dms., 2,000-lb. lots, lb. 1.10 - —
smaller lots lb. 1.12 - 1.17
Phenothiazine, NF, fib. dms., c.s., frt. adjusted lb. .39 - —
over 2,100 lbs., same basis lb. .41 - —
less than 2,100 lbs., same basis, lb. .43 - —
Phenyl acetate, dms., 100-lb. lots, works lb. .50 - —
Salicylate (see Salol.)
Phenylacetaldehyde, soln., 50%, bots lb. 2.40 - 2.70
100%, bots lb. 4.00 - 4.65
Phenylacetamide, 125-lb. dms., works lb. 1.10 - —
smaller dms., works lb. 1.15 - 1.10
dl-Phenylalanine, dms., works lb. 27.00 - 37.50
1-Phenyl-3-carbethoxy pyrazolone-5, 250-lb. fib. drms., dlvd. E lb. 3.60 - —
smaller dms., dlvd. E lb. 4.00 - —
N-Phenyldiethanolamine, dms., c.l., dlvd. E lb. .40½- —
l.c.l., dlvd. E lb. .41½- —
tanks, dlvd. E lb. .38½- —
m-Phenylenediamine, dms., frt. alld. lb. .95 - —
o-Phenylenediamine, coml., 100 to 1,000 lbs., fib. dms., works lb. 1.70 - 1.80
p-Phenylenediamine, tech., refd., dms., works lb. 1.42 - —
Phenylethanolamine, dms., c.l., works lb. .75½- —
l.c.l., same basis lb. .76 - —
Phenylethyl acetate, bots lb. 1.30 - —

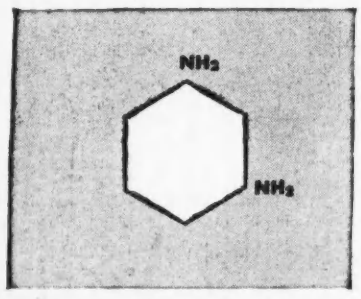
b-Phenylethylamine, dms., 1,000-lb. lots, works lb. 1.10 - —
smaller lots, works lb. 1.15 - 1.40
Phenylhydrazine base, CP, bots lb. 3.00 - 3.07
Hydrochloride, coml., kgs., works, lb. 1.75 - —
purif., bots., works lb. 5.17 - —
1-Phenyl-3-methyl pyrazolone-5, 250-lb. lots, dlvd. E lb. 1.80 - —
smaller lots, dlvd lb. 2.10 - —
Phenylethylphenyl acetate, bots lb. 3.95 - 4.40
o-Phenylphenol, dms., l.c.l., works, lb. .42 - .44
p-Phenylphenol, bgs., c.l., works lb. .35 - —
l.c.l., works lb. .39½- —
Phloroglucinol, coml., fib. dms., works lb. 6.40 - —
C.P., bots., works lb. 17.75 - —
tech., fib. drums., works lb. 10.45 - —
Phosphate, defluorinated (see under D).
Rock, Curacao, Atlantic ports, New Orleans ton. 45.00 - —
Florida, land pebble, run-of-mine, washed, dried unground, bulk, c.l., mines, 68-66%, b.p.l., bulk, c.l., mines long-ton. 4.81 - 4.82
70-68%, b.p.l., c.l., same basis long-ton. 5.21 - 3.23
72-70%, b.p.l., c.l., same basis long-ton. 5.87 - —
75-74%, b.p.l., c.l., same basis long-ton. 6.87 - —
78-76%, b.p.l., c.l., same basis long-ton. 7.87 - —
The Florida prices (above) are based on fuel oil at $2.47 per bbl. and labor at $1.39. Recent labor advance currently absorbed.

Phosphorus, amorph., red, dms., t.l., works lb. .43 - —
smaller lots, works lb. .44 - .48
white (yellow), solid, dms., c.l., works, frt. equald lb. .20 - .20½
l.c.l., works, frt. equald, lb. .21½- —
tanks, works, frt. equald, lb. .19 - —
Oxychloride, dms., c.l., works lb. .14 - —
l.c.l., works lb. .15 - —
tanks, works lb. .12½- —
Pentasulfide, solid, dms., c.l., works lb. .11½- —
l.c.l., works lb. .12½- —
Pentoxide, dms., c.l., works lb. .13½- —
l.c.l., works lb. .16½- —
Sesquisulfide, tins, cs., works lb. .29 - —
export, dms. lb. .31 - .36
Trichloride, dms., c.l., works lb. .14 - —
l.c.l., works lb. .15 - —
tankcars, works lb. .12½- —
Phthalic anhydride, bgs, c.l., works, frt. equald lb. .20 - —
l.c.l., same basis lb. .21 - —
tanks, same basis lb. .19½- —
Phthalimide, 97%-98%, dms., frt. equald lb. .65 - —
Phthalylsulfacetamide, 1,000-lb. lots or more lb. 5.00 - —
a-Picoline, ret. dms., c.l., works, frt. equald lb. .43 - .43½
l.c.l., works, frt. equald lb. .44 - —
tanks, same basis lb. .415 - .422
b,g-Picoline, 5°C, dms., c.l., works, lb. .32½- —
l.c.l., works lb. .33 - —
g-Picoline, 98%, dms., works lb. 2.00 - —
Pilocarpine hydrochloride, USP, bots oz. 4.75 - 5.25
Nitrate, USP, bots., vials oz. 4.65 - 4.75
Pimento, Jamaican, bgs lb. .85 - —
Mexican, bgs. lb. .58 - —
Pink root, bls. lb. 2.00 - 3.25

d-Piperazine hexahydrate, French Codex, bots kilo. 8.00 - 8.50
Piperidine, dist., dms., frt. equald, lb. 2.60 - 2.70
Piperonyl butoxide, dms., dlvd. E lb. 4.50 - 5.05
Cyclonene, dms., dlvd. E lb. 3.70 - 4.25
Pitch, coaltar, 150°-170°F, m.p., tanks, works ton. 37.00 - —
Cottonseed, raw, dms., works lb. .02¼- .03
Linseed, dms. lb. .06 Nom.
Marine, dms. lb. .04¼- .05
Petroleum (see Asphalt, petroleum).
Soybean, dms., works lb. .05 Nom.
Tall, dms., works lb. .03¾- .04½
Plaster of Paris (see Gypsum).
Platinum metal, works oz. 103.00 - 105.00
Pleurisy root, bls. lb. .45 - .50
Podophyllum resin, NF, dms. lb. 15.60 - —
Poke root, bls. lb. .19 - .22
Polymyxin, bulk, bots., dms., 50 billion units or more, 1,000,000 units. .52 - —
25-50 billion units 1,000,000 units. .54 - —
1-25 billion units 1,000,000 units. .56 - —
Polyoxyethylene sorbitan monostearate, dms., 20,000-lb. lots, works lb. .41 - —
10,000-20,000-lb. lots, works, lb. .43 - —
smaller lots, works lb. .46 - .48
tristearate, dms., 20,000lb. lots, 10,000-20,000 lb. lots, works, lb. .41 - —
lb. .43 - —
smaller lots, works lb. .46 - .48
Poppy seed, Argentine, bgs. lb. .17 - —
Dutch, bgs. lb. .22 - —
Iranian, bgs. lb. .15 - —
Polish, bgs. lb. .21 - —
Turkish, bgs. lb. No prices.
Potash, caustic, reg., flake, 88-92%, dms., c.l., works 100 lbs. 9.15 - —
l.c.l., works 100 lbs. 10.20 - —
liq., 45% basis, dms., c.l., works 100 lbs. 4.25 - —
l.c.l., same basis 100 lbs. 5.05 - —
tanks, same basis 100 lbs. 3.70 - —
solid, 88-92%, dms., c.l., works 100 lbs. 8.70 - —
l.c.l., works 100 lbs. 9.75 - —
Potassium acetate, NF, dms lb. .31 - .36
Bicarbonate, USP, gran., dms lb. .22 - —
powd., dms lb. .24 - —
Bichromate, bgs., c.l., works lb. .16½- —
l.c.l., works lb. .17 - —
Potassium bichromate in dms ½c. higher.
Bitartrate, NF, dom., gran. or powd., bbls., 5,000 lbs., 1 ship't lb. .38½- —
dms., c.l. lb. .38 - —
smaller lots lb. .39 - .42
imp, kgs. lb. .29 - —
Bromate, dms., 1,000 lbs. or more, lb. .50 - —
25-200-lb. lots lb. .52 - .62
Bromide, USP, gran., bbls., kgs. lb. .35 - .36
Carbonate, NF, gram., bbls., dms, lb. .20 - —
powd., bbls., dms lb. .21 - .32
tech., calcined, bbls., c.l., works, 100 lbs. 9.00 - —
l.c.l., same basis 100 lbs. 10.05 - —
hydrated, 83-85%, bbls., c.l., works 100 lbs. 7.60 - —
l.c.l., works 100 lbs. 8.65 - —
Chlorate, cryst., dms., c.l., works, lb. .10¼- —
l.c.l., works lb. .10½- .11¼
powd., dms., c.l., works lb. .10¾- —
l.c.l., works lb. .11 - .12
NF, gran., 25-lb. metal dms lb. .35 - —
Chloride, agricultural (see Potassium muriate).
indust., 99.9% KCl, bulk, c.l., works ton. 28.00 - —
bgs., c.l., works ton. 32.25 - —
99.3% KCl, bulk, c.l., works, ton. 26.00 - —
bgs., c.l., works ton. 30.40 - —
USP, cryst., dms lb. .21 - .23
gran., dms lb. .15 - .17
powd., dms lb. .24 - .26
Chromate, tech., bgs lb. .50 - .50½
Citrate, USP gran., dms lb. .41 - —
powd., dms lb. .40½- .41½
Cyanide, dms., 20,000-lb. lots or more, works lb. .45 - —
2,000-19,999-lb. lots, works lb. .455 - —
smaller lots, works lb. .465 - —
Dichromate (see Potassium bichromate).
Ferricyanide, dms., ton lots lb. .50 - —
Ferrocyanide, bgs., ton lots lb. .22½- —
smaller lots lb. .23 - —
Fluoborate, fib. dms., c.l., works, lb. .30 - —
l.c.l., works lb. .31 - —
Fluoride, dms., works lb. .37 - .38
Gluconate, dms. lb. 1.60 - —
Guaiacolsulfonate, NF, dms lb. 2.10 - 2.30
Hydroxide, tech. (see Potash caustic).
USP, pellets 100-lb. dms. 1 to 100-dm. lots lb. .28½- .33
Hypophosphite, NF, fib. dms., ton lots or less lb. 1.00 - 1.03
Iodide, dms lb. 1.90 - 1.95
Manure salt, 22% K_2O, base price, unit-ton. .17 - .176
July forward unit-ton. .38 - —
Metabisulfite, gran., dms ton. .20 - .21
powd., dms lb. .25 - —
Muriate, 59-63% K_2O, bulk, c.l., works, base price unit-ton. .36 - —
July forward unit-on. .38 - —
39-63% K_2O_2, bgs, c.l., works, base price ton. 26.00 - —
July forward ton. 27.20 - —
Nitrate, cryst., bbls., 20-ton lots, 100 lbs. 14.40 - —
smaller lots 100 lbs. 14.65 - 14.90
gran., bbls., 20-ton lots 100 lbs. 9.75 - —
smaller lots 100 lbs. 11.10 - 11.50
powd., bbls., 20-ton lots 100 lbs. 10.75 - —
smaller lots 100 lbs. 12.00 - 12.50
USP, gran., dms. lb. .18 - —
Potassium nitrate in bags 50c. per 100 lbs. less in kegs, $1 more.
Oxalate, neutral, tech., fine gran., bbls., dms lb. .30 - .32
Pentaborate, gran., bgs., c.l., works ton. 191.50 - —
dms., ton lots, ex whse ton. 198.00 - —
smaller lots, ex whse ton. 302.50 - —
Powdered potassium pentaborate $10.25 per ton higher.
Perchlorate, dms., c.l., works lb. .17½- —
l.c.l., works lb. .18 - .19
Permanganate, coml., kgs., works, lb. .24½- .27¼
USP, dms., works lb. .27¼- .29
Persulfate, dms., 5-ton lots, works, lb. .18 - —
1-ton lots, works lb. .20 - —
Phosphate, tertabasic, bbls., works, lb. .16½- .18½
Prussiate, red (see Potassium Ferricyanide).
yellow (see Potassium Ferrocyanide).
Silicate, glass bgs., c.l., works, 100 lbs. 17.00 - 17.30
l.c.l., works 100 lbs. 17.80 - —

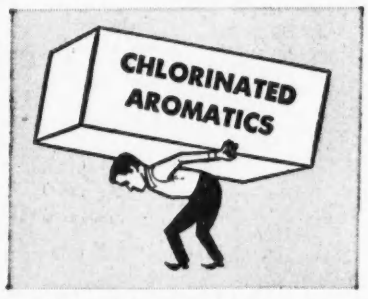
CAN YOU PICK THE RIGHT ANSWERS IN THIS

30-Second Quiz on Intermediates?



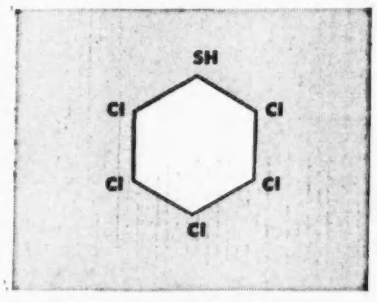
1. Du Pont m-Phenylenediamine is particularly useful as a:

- ☐ **A.** Emulsion stabilizer
- ☐ **B.** Epoxy resin curing agent
- ☐ **C.** Dispersion medium for colloidal sodium



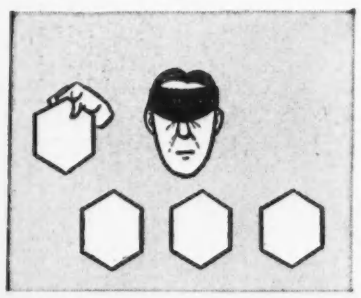
2. Weighed down by making your own chlorinated aromatics? A sure way to get out from under is to:

- ☐ **A.** Write to all major chemical manufacturers
- ☐ **B.** Let the chemist to your right do it
- ☐ **C.** Phone Du Pont



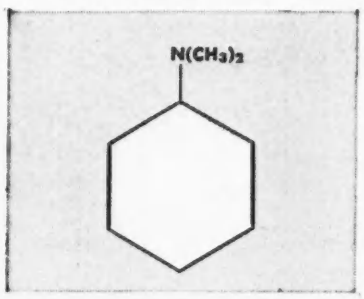
3. This is the formula for Du Pont Pentachlorobenzenethiol. We call it highly reactive because it:

- ☐ **A.** Readily forms metallic salts
- ☐ **B.** Is easily oxidized to the corresponding disulfide
- ☐ **C.** Will condense with aldehydes to form thioacetals



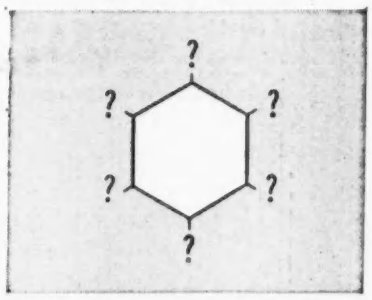
4. Picking out an intermediate and hoping is the hard way to solve your problem. The easiest and surest way is to:

- ☐ **A.** Study them all and then choose
- ☐ **B.** Select two at a time
- ☐ **C.** Let Du Pont pick one out for you



5. Meet Du Pont N,N-Dimethylaniline. You may have heard about its use as a:

- ☐ **A.** Promoter in polymerization of polyesters
- ☐ **B.** Toning agent for paints
- ☐ **C.** Stabilizer for polyvinyl chlorides



6. Suppose you have an unusual intermediate in mind. Your first move should be:

- ☐ **A.** Write Du Pont
- ☐ **B.** Consult Du Pont
- ☐ **C.** Call Du Pont by phone

• When you have any kind of problem in intermediates, be sure to consult Du Pont—manufacturer of the greatest variety offered by any chemical company. Du Pont specialists are ready to help you in the selection and application of intermediates at all times.

Now let's see how you did on the quiz. Answers: 1-B; 2-C; 3-ABC; 4-C; 5-A; 6-ABC. There's a complete line of Du Pont intermediates containing nitro, amino and sulfo groups. Consult us for the intermediate you need before attempting nitrations, chlorinations or reductions.

Just drop us a note and let us try to help. Address: E. I. du Pont de Nemours & Co. (Inc.), Organic Chemicals Dept., Chemicals Div., Wilmington 98, Delaware.

DU PONT
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BETTER THINGS FOR BETTER LIVING
...THROUGH CHEMISTRY

ORGANIC CHEMICALS DEPARTMENT

Potassium silicate, soln., clarif. 29° Be, 1:2.5, dms., c.l., works. 100 lbs.	5.80	-	—
l.c.l., 5 dms. or more works 100-lbs.	6.55	-	6.95
tanks, works 100-lbs.	5.45	-	—
electrical grade, 29° Be, 1:2.0 dms., c.l., works 100 lbs.	6.50	-	—
l.c.l., 5 dms. or more, works 100 lbs.	7.25	-	7.65
tanks, works 100 lbs.	6.15	-	—
40.5° Be, 1:2.1, dms., c.l., works 100 lbs.	6.45	-	—
l.c.l., 5 dms. or more works 100 lbs.	7.20	-	7.60
Silicofluoride, bgs., works lb.	.09½	-	.10
Potassium silicofluoride in drums, 0.4c. per lb. higher.			
Stannate, dms., frt. alld. E lb.	.697	-	.763
Sulfate agricultural, 50% K_2O, bulk, works, base price, unit-ton.	.64	-	—
July forward unit-ton.	.67	-	—
NF VII, cryst., dms lb.	.31	-	.33
gran., dms. lb.	.18½	-	—
powder, dms. lb.	.16½	-	.17
Sulfocyanate, NF, cryst., (see Potassium thiacyanate).			
Thiocyanate, NF, cryst., dms lb.	.84	-	.94
tech., works lb.	.77	-	.79
Titanate, ctns., c.l., works lb.	.14	-	—
5-ton lots, works lb.	.14½	-	—
1-ton lot or less, works lb.	.14¾	-	—
Toluene sulfonate, dms., c.l. or tl., works lb.	.42	-	—
l.c.l., works lb.	.46	-	—
Potassium-magnesium sulfate, bulk, works, basis 40% K_2SO_4, 18% MgO, base price ton.	13.45	-	—
July forward ton.	14.00	-	—
Potassium-sodium tartrate, NF, gran. powd., dms., c.l lb.	.40½	-	—
5,000-lb. lots lb.	.41	-	—
smaller lots lb.	.41½	-	.47
Potassium-titanium fluoride, tib. dms, works lb.	.39	-	.40
Potassium-zirconium fluoride, fib. dms, c.l., works lb.	.50	-	—
l.c.l., works lb.	.52½	-	.55
Pregnenolone, bots. gram.	.45	-	—
Acetate, bots. gram.	.40	-	—
Procaine hydrochloride, USP, dms., 1,000-lb. lots, frt. alld lb.	2.90	-	—
100-lb. lots lb.	3.00	-	3.60
Progesterone, USP, bots., 100 gram lots gram	.50	-	—
Acetate, bots. gram	.70	-	—
Propane, indust., tanks, group 3 gal.	.04½	-	—
N. Y. Harbor gal.	.09	-	—
n-Propyl acetate, dms., c.l., dlvd lb.	.12¾	-	—
l.c.l., dlvd. lb.	.13¾	-	—
tanks, dlvd. lb.	.1075	-	—
Gallate, dms., 100 to 2,000-lb. lots, works lb.	3.90	-	4.40
p-Hydroxybenzoate, USP, dms lb.	2.30	-	2.40
Propyl thiouracil, bots., 50-kilo lots or more kilo.	55.00	-	—
smaller lots kilo.	55.10	-	55.30
Prices in West 1c. higher dlvd., on same basis			
Propylene dichloride, dms., c.l., dlvd. E lb.	.0825	-	—
l.c.l., same basis lb.	.095	-	—
tanks, same basis lb.	.07	-	—
Glycol, indust., dms., c.l., dlvd. E lb.	.15½	-	—
l.c.l., same basis lb.	.16½	-	—
tanks, same basis lb.	.13½	-	—
USP, dms., c.l., dlvd. E lb.	.17½	-	—
l.c.l., same basis lb.	.18½	-	—
tanks, same basis lb.	.15½	-	—
Methyl ether, dms., c.l., dlvd lb.	.20	-	—
l.c.l., same basis lb.	.21	-	—
tanks, same basis lb.	.18½	-	—
Oxide, dms., c.l., dlvd. E lb.	.17½	-	—
l.c.l., dlvd. E lb.	.18½	-	—
tanks, dlvd. E lb.	.15½	-	—
Psyllium seed, black, bgs. lb.	.55	-	—
blonde, bgs. lb.	.18	-	—
husks, bgs. lb.	.40	-	—
Pumice, dom., grd., coarse to fine, 0, ½, 1, 1½, 2, 3, bgs., ton lots lb.	.03¾	-	.04¼
smaller lots lb.	.03⅞	-	.04½
imp., Italian, silk-screen, coarse, bgs., ton lots lb.	.06½	-	—
fine, bgs., ton lots lb.	.04	-	—
sun dried, coarse, bgs. ton lots lb.	.02½	-	.04
fine, bgs., ton lots lb.	.02½	-	.04
Pumpkin seed, bgs lb.	.25	-	.26
Pyrethrin, syn. (see Allethrin).			
Pyrethrum flowers, fine grd., 0.9% pyrethrins, bbls., works lb.	.45	-	—
powd., 1.3% pyrethrins, obls., works lb.	.63	-	—
liq. 20/1 basis (2 grams pyrethrins per 100cc odorless base), dms., works gal.	8.75	-	8.80
100/1 basis (10 grams pyrethrins per 100cc odorless base), dms., works gal.	41.75	-	42.75
oleoresin, dewaxed, 20%, dms., works lb.	10.00	-	—
purif., 20% dms., works lb.	10.00	-	10.10
Pyridine, denaturing, dms., c.l., works and frt. equald gal.	2.77	-	—
l.c.l., same basis gal.	2.80	-	—
refd., 2°, non-ret. dms., l.c.l., same basis lb.	.75	-	—
Pyridoxine hydrochloride, bots., 100-gram lots gram.	.37½	-	—
Pyrites, Canadian, works long-ton.	3.00	-	5.00
Pyrocatechol (see Catechol).			
Pyrogallol, NF, dms. lb.	3.27	-	3.30
Pyroxylin, scrap, ungrd., amber, dms., works lb.	.20	-	—
black, dms., works lb.	.12	-	—
mixed, mottled, cms. works lb.	.13		—
shavings, amber, cs., works lb.	No stocks.		
mixed colors, dms., works lb.	.11	-	—
white, china, ivory, dms., works lb.	.16	-	—
dense, opaque, dms., works, lb.	.12	-	.15
translucent pastels, cs., works, lb.	.14	-	—
translucent pastels, cs., works, lb.	.25	-	—
colors, dms., works lb.	.15	-	—
USP, bots lb.	9.50	-	—

Q

Quassia chips lb.	.17	-	—
Quebracho extract, clarif., grd., 70% tannin, bgs., c.l., lb.	.16¼	-	.16¾
liq., 35% tannin, bbls., works, lb.	.08¼	-	—
solid, clarif., 64% tannin, bgs., c.l., exdock, duty extra lb.	.12 23/64		
ord., 63% tannin, bgs., c.l., same basis lb.	.11 21/32	-	—
Quercitron extract, cryst., No. 1, bbls., l.c.l. lb.	.40	-	—
liq., No. 1, bbls., l.c.l lb.	.19	-	—
Quicksilver (see Mercury metal).			
Quince seed, bgs lb.	2.00		Nom.
Quinidine sulfate, USP, cns., 100-oz. lots oz.	.75	-	.87
Quinine, NF, cns., 100-oz. lots oz.	.54	-	—
Bisulfate, USP, cns., 100-oz. lots, oz.	.37½	-	—
Ethylcarbonate, NF, cns., 100-oz. lots oz.	.63½	-	—
Hydrobromide, NF, cns., 50-oz. cns oz.	.47½	-	—
Sulfate, USP, cns., 100-oz. lots oz.	.42	-	—
Quinine and Urea hydrochloride, NF, cns oz.	.56	-	—
Quinoline, dms., c.l., frt. equald lb.	.50¾	-	—
l.c.l., same basis lb.	.51¼	-	—
tanks, same basis lb.	.50	-	—

R

R salt, paste, dms., frt. alld., 100% basis lb.	.88	-	—
powd., frt alld. 100% basis lb.	.98	-	—
Rauwolfia serpentina root, powd., bbls., dms lb.	2.00	-	—
Red, BON acid maroons, pure, bbls., lb.	1.75	-	—
resinated, bbls lb	1.50	-	—
arylid, deep shades, bbls lb.	3.60	-	—
light shades, bbls lb.	2.75	-	—
maroon, bbls lb.	3.60		5.90
Cadmium, CP, dark shade, bbls., frt. alld. E of Rockies lb.	4.20	-	—
light shade, bbls., same basis, lb.	4.00	-	—
medium shade, bbls., same basis lb.	4.25	-	—
medium light shade, bbls., same basis lb.	4.05	-	—
orange shade, bbls., same basis, lb.	3.95	-	—
orange red, bbls., same basis, lb.	1.81	-	—
Selenide lithopone, light red shades, bbls., same basis lb.	2.24	-	2.32
medium light red shades, bbls., same basis lb.	2.49	-	—
medium red shade, bbls., same basis lb.	2.99	-	—
dark red shade, bbls., same basis lb.	3.44	-	—
maroon shade, bbls., same basis lb.	3.77	-	—
dark maroon shade, bbls., same basis lb.	3.90	-	—
Red, cadmium mercury lithopone, light shade, bbls lb.	1.95	-	—
medium-light shade, bbls. lb.	2.10	-	—
medium shade, bbls lb.	2.25	-	—
dark shade, bbls lb.	2.40	-	—
Carmine No. 40 (see Carmine).			
Dyes (see Dyes, coaltar).			
Eosin toner, bbls., works lb.	1.65	-	—
Indian, dom., pure, bgs., Bethlehem, Easton E St. Louis, N. Y lb.	.12¾	-	—
Iron oxide, nat., 75-85% ferric oxide, bgs. l.c.l. Bethlehem, Pa., Copley, O., Easton, Pa., bgs., c.l., works lb.	.0675	-	—
Lake C toner, alizarin, bbls., works lb.	1.13	-	—
rubine toner, pure, bbls. works, lb.	1.50	-	—
resinated, bbls., works lb.	1.40	-	—
Virginia type, bbls., works lb.	1.40	-	—
Maroon toner, MNPT, kgs., c.l., works lb.	3.60	-	—
10,000-lb lots, works lb.	4.22	-	—
smaller lots, works lb.	4.24	-	—
Mercury oxide, tech., c.l., works, lb.	5.77	-	—
Metallic, bbls., c.l., works lb.	.02½	-	—
l.c.l., works lb.	.02¾	-	—
Naphthol, ITR, bbls., works lb.	5.25	-	—
Oxide (see Red iron oxide).			
Persian Gulf, bgs., c.l., works, lb.	.07¾	-	—
l.c.l., works lb.	.08	-	—
Para toner, bbls lb.	1.10	-	—
chlorinated, kgs lb.	1.10	-	1.15
Phloxin toner (see Red eosin toner).			
Red, rhodamine, molybdated, PMA, kegs lb.	5.35	-	5.60
tungstated, PTMA works, kegs, lb.	6.40	-	—
Spanish oxide, bbls., c.l., ex-dock, lb.	.05¾	-	—
l.c.l., ex dock lb.	.06	-	—
ex whse., New York lb.	.06½	-	—
Toluidine toner, deep shades, kgs., works lb.	1.62		1.65
light shades, kgs., works lb.	1.62		1.65
Turkey, bbls., works lb.	.62	-	—
Tuscan, bbls., frt. equald lb.	.26	-	.32
Venetian, jobbing, bgs., works lb.	.0475	-	—
20%, bgs., works lb.	.0525	-	—
25%, bgs., works lb.	.0575	-	—
30%, bgs., works lb.	.06	-	—
35%, bgs., works lb.	.0625	-	—
40%, bgs., works lb.	.0375	-	—
Watchung-type, bbls lb.	1.95		—
Red KB base (see 4-Chloro-2-aminotoluene).			
Red, precipitate (see Mercuric oxide, red).			
Red saunders, NF, powd., bbls lb.	.35		.40
Reserpine, cryst., bots gram.	5.00	-	5.50
Resorcinol, tech grade, dms., c.l., works, frt. equald lb.	.77½	-	—
l.c.l., same basis lb.	.78½	-	—
USP, dms., works lb.	2.75	-	—
powd., dms., works lb.	2.95	-	—
Monoacetate, NF dms lb.	3.00		3.25
Rhatany root, bgs lb.	.15		.16
Rhodinol, 5-lb. cans lb.	25.50		34.00

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Sodium Nitrite • Ammonium Chloride • Methylene Chloride • Methyl Chloride
Carbon Tetrachloride • Caustic Soda • Monochlorobenzene • Para-dichlorobenzene

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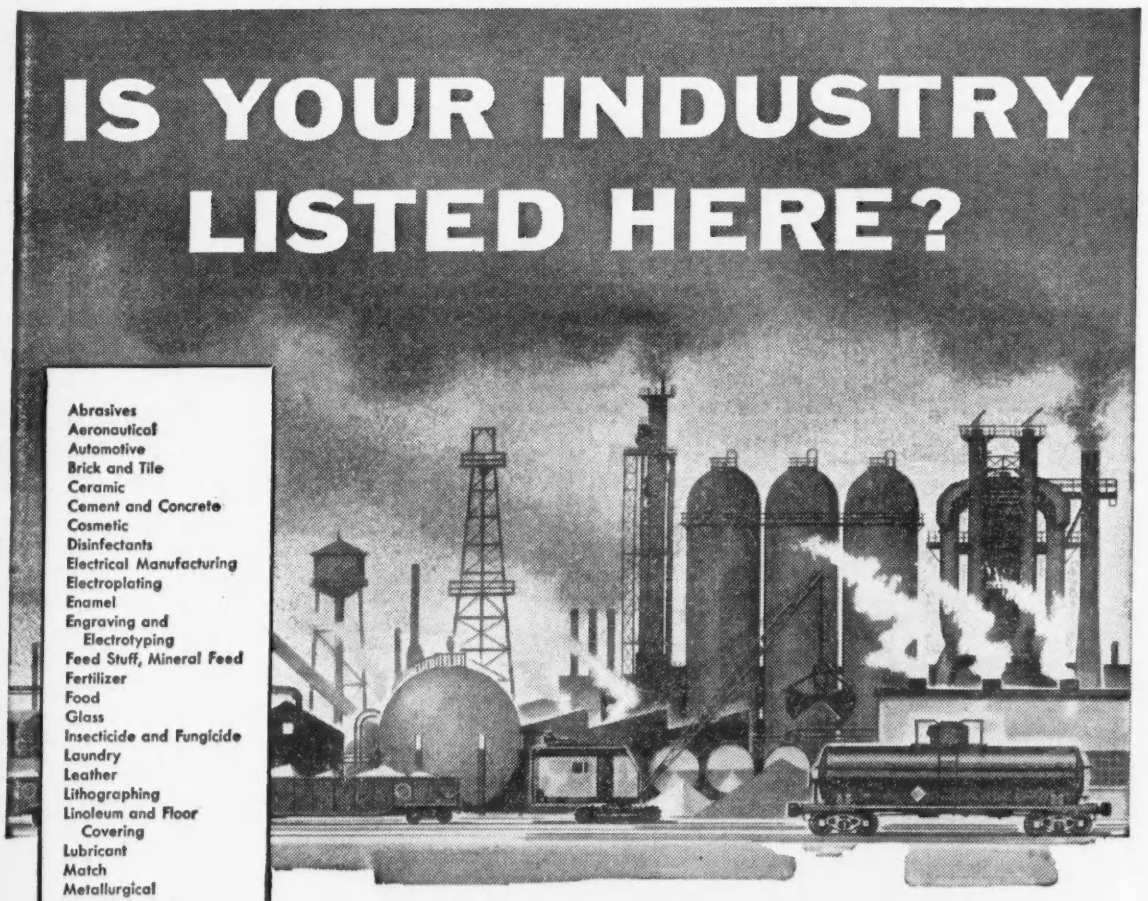
Rhubarb root, India, whole, bgs lb. 1.75 Nom.
powd., bbls lb 2.50 Nom.
Riboflavin, USP, bots., dlvd kilo.65.00 • —
readily soluble, bots., dlvd kilo.130.00 • —
5'-phosphate-sodium, bots., 100-kilo lots or more kilo.125.00 • —
Rochelle salt (see Potassium sodium tartrate).
Rosin gum and wood (see Naval Stores in Protective Coatings market).
Rotenone, fib. dms., works, 100% basis lb.10.00 • —
resin, 25-45%, fib. dms., works, 30% basis lb. 3.00 • 3.30
Rottenstone, bgs., 5-ton lots, exwhse lb. .03 • —
ton lots, same basis lb. .04 • —
Rutin, NF, fib. dms. 25-kilo lots, kilo.17.50 -18.50
10 to 25-kilo lots kilo.17.50 -20.00
1 to 10-kilo lots kilo.18.90 -20.00
Ryania, 100%, powd., bgs., c.l., works lb. .22 • —
l.c.l., same basis lb. .24 • —

S

Sabadilla seed, powd., bbls lb. .49 • .49½
activated, ground with lime, bbls. lb. .30 • .32
Saccharin, USP, cryst., soluble, dms., 1000-lb. lots lb. 1.60 • —
smaller lots lb. 1.70 • 1.80
Saccharin, USP, powd., soluble, insoluble, dms., 1,000-lb. lots lb. 1.65 • —
smaller lots lb. 1.75 • 1.95
Calcium, fib. dms., 1,000-lb. lots, works lb. 2.50 • —
Saffron, Spanish, USP, tins lb.45.00 • —
Safrol, dms. lb. 1.00 • —
Sage, Cretan, bgs lb. .11 • —
Dalmatian, bgs. lb. .44 • —
Italian lb. .26 Nom.
Sago flour, raw, bgs lb. .07 • .07¼
refd., bgs lb. .08½ • .09
Sal soda (see Soda sal).
Salicylamide, 100-lb. dms lb. 1.00 • —
Salol, NF, gran., bbls., kgs. lb. 1.15 • —
Powdered salol, 25c. higher
Salt rock, paper bgs., c.l. 100 lbs. 1.03 • —
table, vacuum, common, fine, paper bgs., c.l. 100 lbs. 1.23 • —
Saltcake, dom., bulk works, 100% Na_2SO_4 basis ton.28.00 • —
Saltpeter (see Potassium nitrate).
Sandalwood, East Indies, chips bgs. .65 • .66
powd., fib. dms lb. .75 • .76
Sarsaparilla root, imp., Honduras, bls lb. .58 • .62
Mexican, bls. lb. .58 • .62
Sassafras root bark, ord., bls lb. .45 • —
select, bbls. lb. .65 • —
Schaeffer's salt, paste, dms., frt. alld. 100% basis lb. .95 • —
powd., bgs., frt. alld., 100% basis. lb. .95 • —
Scopolamine hydrobromide, USP, bots oz.17.40 • —
Seidlitz mixture, bbls., 5,000-lb. lots lb. .30½ • —
smaller lots lb .31 • .32
Selenium, powd., dms., dlvd lb.13.50 -15.50
Senega root, bls lb. 3.10 • —
Senna leaves, Alex. whole and half, bls lb. .19 • —
siftings lb. .17 • —
Tinnevelly, No. 1, bls. lb. .16 • .18
No. 2, bls. lb. .13 • .15
No. 3, bls. lb. .11 • .13
powdered, bbls., bxs. lb. .18 • —
pods, bls. lb. .14 • —
Serpentaria, root, bls lb. 5.50 • —
Sesame seed, Egyptian, nat. lb. .16¾ • —
hulled lb. .21 • —
Nicaragua, hulled, shipt., bgs. lb. .17½ • —
nat., bgs. lb. .26½ • —
Salvadorian, natural lb. .17½ • —
Syrian, bgs., natural lb. .16 • —
Shellac, bleached, bonedry, bgs., 1,500-lb. lots lb. .58 • —
bbls., 1,500-lb lots lb. .60 • —
kgs., 1,500-lb lots lb. .61 • —
refd., bgs., 1,500-lb. lots lb. .66 • —
bbls., 1,500-lb. lots lb. .68 • —
kgs., 1,500-lb. lots lb. .69 • —
Bonedry shellac prices for less than 1,500 lb. lots 1c. per lb. higher for all packages.
Lemon No. 1, bgs., 10-bg. lots lb. .48 • —
No. 2, bgs., 10-bg. lots lb. .46 • —
Superfine, bgs., 10-bg. lots lb. .43 • .44
TN, bgs., 10-bg. lots lb. .42 • —
Shellac in 1 to 10-bg. lots 1c. per lb. more.
Shingle stain oil (see Oil, shingle stain).
Silica, amorph., dry-grd., 325 mesh, bgs., c.l., works ton.25.00 • —
l.c.l., works, exwnse ton.45.00 -55.00
Silica, hard-quartz, 99½%, 325 mesh, bgs., c.l., works ton.20.00 • —
l.c.l., works ton 25 00 -30.00
140 mesh, bgs., c.l., works ton.15.00 • —
l.c.l., works ton.20.00 • —
Silicon tetrachloride, tech., dms., c.l., works lb. .18 • —
l.c.l., works lb. .22 • .30½
tanks, works lb. .17 • —
Silver bullion, ingots, cs Troy oz. .90¾ • —
Cyanide, fib. dms., 2,500-oz. lots. oz. .84½ • —
1,000-oz. lots oz. .84½ • —
500-oz. lots oz. .84⅝ • —
100-oz. lots oz. .84⅞ • —
Nitrate, CP, cryst., bots., 2,500-oz. lots oz. .60 • —
1,000-oz. lots oz. .61½ • —
500-oz. lots oz. .61¾ • —
250-oz. lots oz. .62¼ • —
USP granular silver nitrate 4c. per oz higher.
Proteinate, mild, USP, bots., dms., 1,000-oz. lots oz. 1.05 • —
strong, NF, bots., dms., 1,000-oz. lots oz. 1.00 • —
Soapbark, whole, bls lb. .38 • .40
crushed, bls., bbls lb. .45 • —
powd., bbls. lb. .45 • —
Soda ash, dense, 58%, paper bgs., c.l. works 100 lbs. 1.80 • —
l.c.l., stock points 100 lbs. 2.90 • 4.67
bbls., c.l., works 100 lbs. 2.40 • —
l.c.l., stock points 100 lbs. 3.55 • 4.22
bulk, c.l., works 100 lbs. 1.50 • —
light, 58%, paper bgs., c.l., works 100 lbs. 1.75 • —
l.c.l., stock points 100 lbs. 3.85 • 4.62
bbls., c.l., works 100 lbs. 2.30 • —
l.c.l., stock points 100 lbs. 3.35 • 5.62
bulk, c.l., works 100 lbs. 1.45 • —
Soda, caustic, flake, 76%, dms., c.l., works, frt. equald 100 lbs. 4.50 • —
l.c.l., stock points 100 lbs. 5.60 • —
liq., 50% sellers, tanks, works, dry basis 100 lbs. 2.80 • —
rayon type, sellers, tanks, works, dry basis 100 lbs. 2.80 • 2.90
70%, sellers' tanks, works, dry basis 100 lbs. 2.90 • —
rayon-type, sellers tanks, works, dry basis 100 lbs. 2.90 • 3.00
solid, 76%, dms., c.l., works, 100 lbs. 4.10 • —
l.c.l., stock points 100 lbs. 5.20 • —
Sal., conc., bgs., c.l., works 100 lbs. 2.30 • —
smaller lots, works 100 lbs. 2.60 • —
Sodium acetate, anhyd., bgs., c.l., works lb. .13 • —
dms., c.l., works lb. .13¾ • —
NF, 60%, gran., dms., c.l., works lb. .14 • —
l.c.l., works lb. .15½ • —
Alginate, NF, white powd., dms., ton lots, works lb. .87 • 1.30
refd., bbls., works lb. .83 • —
p-Aminobenzoic, dms., 1,000-lb. lots or more lb. 2.25 • —
smaller lots lb. 2.35 • 2.45
p-Aminosalicylate, dms., 1,000-lb. lots or more, frt. adjusted lb. 3.75 • —
smaller lots, same basis lb. 2.80 • 4.25
Antimoniate, bbls., c.l., dlvd. E lb. .28 • —
l.c.l., dlvd. E lb. .29½ • —
Arsenate, 45% arsenic pentoxide, dms., c.l., works lb. .12½ • —
l.c.l., works lb. .13¾ • .14½
Arsenite, 90%, pink powder, 75% arsenious oxide, dms., works lb. .12¼ • —
l.c.l., works lb. .13 • .14½
soln., dms., works gal. .59 • .67
Ascorbate, dms., 25-50 kilo lots. kilo.12.00 • —
10-kilo lots kilo.12.35 • —
5-kilo lots kilo.12.75 • —
1-kilo lots kilo.13.00 • —
bots., 500-gram lots kilo.13.50 • —
Benzoate, tech., bbls., dms., lots or more lb. .39 • —
USP, bbls., dms., 100-lb. lots, or more lb. .46 • —
Bicarbonate, USP, gran., bgs., c.l., works 100 lbs. 2.80 • —
l.c.l., works 100 lbs. 3.55 • —
powd., bgs., c.l., works, 100 lbs. 2.40 • —
l.c.l., works 100 lbs. 3.15 • —
Bichromate, bgs., c.l., works lb. .12¼ • —
l.c.l., works lb. .12¾ • .13¾
Bifluoride, bbls., c.l., works, frt. equaled lb. .18½ • —
l.c.l., same basis lb. .1890 • —
Bisulfate, bulk, c.l., works 100 lbs. 2.00 • —
dms., c.l., frt. equald 100 lbs. 3.00 • 3.60
l.c.l., frt. equald 100 lbs. 3.50 • 4.10
Bisulfite, anhyd., bgs., c.l., works, 100 lbs. 4.50 • —
l.c.l., works 100 lbs. 4.90 • —
soln., 35°, bbls., c.l., works, 100 lbs. 1.55 • —
l.c.l., works 100 lbs. 2.05 • —
Borate (see Borax).
Bromide, USP, bbls., works lb. .36 • —
Carboxymethyl cellulose (see CMC).
Carbonate, cryst., monohydrated (see Soda, sal).
monohydrated bgs., c.l., works, 100 lbs. 3.00 • —
l.c.l., works 100 lbs. 3.40 • —
Chlorate, cryst., dms., c.l., works, lb. .09 • —
l.c.l., works lb. .10½ • .11¼
Chloride, tech (see Salt)
USP, bgs. lb. .05 • .12
Chlorite, tech., dms., c.l., works, lb. .58 • —
20-ton lots or more, works, lb. .66 • —
smaller lots, works lb. .70 • .73
Chloroacetate, tech., dms., c.l., works lb. .27 • —
l.c.l., works lb. .28 • —
Chromate, dms., c.l., works lb. .13¼ • —
l.c.l., same basis lb. .13¾ • .15
Citrate, anhyd., dms lb. .62 • —
NF VIII, gran., dms lb. .26½ • .27½
USP, XIV gran., dms lb. .29½ • .30½
Sodium citrate, USP, powd. prices ½c. higher.
Cyanate, dms., 1,000-lb. lots, works lb. .85 • 1.10
smaller lots, works lb. 1.00 • 1.25
Cyanide flake, 96-98%, dms., c.l., or 20,000-lb. lots lb. .178 • —
over 1,000-lb. lots lb. .188 • —
100-lb. to 1,000-lb lots lb. .198 • —
Granular sodium cyanide 1c. higher.
Diacetate, 33-35% acidity, 250-lb. dms., works lb. .15 • —
l.c.l., works lb. .15¾ • —
anhyd., dms., c.l., works lb. .18 • —
l.c.l., works lb. 18¾ • —
Dichromate (see Sodium bichromate).
Ferrocyanide, bgs., 10-ton lots lb. .13½ • —
smaller lots, lb. .14 • —
Fluoride, white, 97%, fib. dms., c.l., works, frt. equald lb. .1390 • —
l.c.l. works lb. .1430 • —
Formate, bgs., c.l., works lb. 7.60 • —
l.c.l., works 100 lbs. 8.65 • —

IS YOUR INDUSTRY LISTED HERE?



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Gluconate, refd., dms. ..... lb. .80 • .83
tech, dms. ..... lb. .35 • —
Glutamate, mono., dms., c.l. .... lb. 1.20 • —
Hydride, dms., works ..... lb. 1.80 • 3.00
Hydrosulfide (see Sodium sulfhydrate).
Hydrosulfite, dms., c.l., frt. alld. lb. .22 • —
l.c.l., frt. alld. ..... lb. .22½ • —
Hydroxide, NF, pellets, 100-lb. dms., 1 to 100-dm. lots lb. .18½ • .23
technical (see Soda, Caustic).
Hypophosphite, NF, dms., ton-lots or less lb. .93 • .98
Hyposulfate, NF (see Sodium sulfate).
pea crystals, bgs. ..... 100-lbs. 4.50 • —
gran., bgs., c.l., works 100 lbs. 4.75 • 5.00
Hyposulfite, photo grade, bgs., c.l., works 100 lbs. 4.50 • 4.75
l.c.l., works ..... 100 lbs. 5.00 • 5.05
l.c.l., works ..... 100 lbs. 4.90 • 6.90
Sodium hyposulfite crystals in bbls., 50c. higher.
Iodide, USP, bots., dms ..... lb. 2.55 • 2.62
Lactate, edible, 50%, cbys., dms., works lb. .21½ • —
60% cbys., dms., works lb. .26½ • —
tech., 50%, cbys., dms., works lb. .16½ • —
Lauryl sulfate, dms., c.l., dlvd lb. .21 • —
l.c.l., dlvd ..... lb. .22 • —
tanks, dlvd ..... lb. .18½ • —
Metabisulfite (see Sodium bisulfite).
Metaborate, octahydrate, gran., bgs., c.l., works ton 85.00 • —
l.c.l., ex whse ..... ton 135.50 • 140.50
Sodium metaborate octahydrate in bbls, $24.50 per ton higher.
Metaborate tetrahydrate, dms., c.l., works ton 204.00 • —
Metallic bricks, 14,000-lb. lots or more, works lb. .17 • .19
less than 14,000-lb. lots, works. lb. .175 • .195
tanks, works ..... lb. .16 • —
Metanilate, bbls., frt. alld ..... lb. .62 • —
Metasilicate, anhyd., bgs., c.l., works 100 lbs. 5.35 • —
l.c.l., works ..... 100 lbs. 5.70 • 7.65
dms., c.l. ..... 100 lbs. 5.80 • —
l.c.l. ..... 100 lbs. 6.20 • 8.10
Pentahydrate, bgs., c.l., works. 100 lbs. 4.25 • —
l.c.l., works ..... 100 lbs. 4.60 • 6.50
dms., c.l., works ..... 100 lbs. 4.75 • —
l.c.l., works ..... 100 lbs. 5.10 • 7.00
Molybdate, anhyd., dms., dlvd lb. .88 • —
cryst., dms., works ..... lb. .69 • .73
Monohydrate (see Sodium carbonate monohydrated).
Naphthionate bbls ..... lb. .70 • —
Nitrate, crude, dom., bgs., c.l., works ton 47.00 • —
bulk, c.l., works ton 43.50 • —
imp., 100-lb. bgs., c.l., Atl. Gulf, Pac., whse ton 51.25 • —
bulk c.l., same basis ton 47.75 • —
USP, bbls., c.l., works, frt. equald lb. .08 • —
l.c.l., same basis ... lb. .09½ • —
Orthosilicate, conc., dms., c.l., works 100 lbs. 6.30 • —
l.c.l., works ..... 100 lbs. 6.65 • 7.25
hydrated, flake, bbls., c.l., works 100 lbs. 5.40 • —
l.c.l., works ..... 100 lbs. 7.30 • 7.65
Oxalate, 88%, bgs., works ..... 100 lbs. 10.85 • —
Para-aminobenzoate (see Sodium p-Aminobenzoate).
Para-aminosalicylate (see Sodium p-Aminosalicylate).
Pentachlorophenate, briquets, bgs., c.l., works, frt. equald lb. .25 • —
l.c.l., same basis ..... lb. .26½ • .33
pellets, bgs., c.l. same basis lb. .25 • —
l.c.l., same basis ..... lb. .26½ • .33
Pentachlorophenate, powd., bgs., dms., c.l., same basis lb. .24 • —
l.c.l., same basis ..... lb. .25½ • .32
Pentachlorophenate, 20,000 lbs., min. truckloads, ¼c. per lb. over carlot prices.
Perborate, NF, tech., bgs., c.l., works lb. .173 • —
l.c.l., works ..... lb. .178 • —
Peroxide, dms., c.l., dlvd. E. of Miss. lb. .1860 • —
l.c.l. same basis lb. .1910 • .1960
Phenolsulfonate, USP IX, gran., dms lb. .44 • .45
Phosphate, dibasic, anhyd., bgs., c.l., frt. equald 100 lbs. 7.45 • —
l.c.l., works ..... 100 lbs. 7.85 • —
USP dried powd. bgs., dms., works lb. .19 • .20½
monobasic anhyd., bgs., c.l., frt. equald 100 lbs. 8.70 • —
l.c.l., frt. equald 100 lbs. 9.10 • 9.70
duohydrate, bgs., c.l., frt. equald 100 lbs. 7.20 • —
l.c.l., frt. equald 100 lbs. 7.60 • 8.20
tribasic, anhyd., bgs., c.l., frt. equald 100 lbs. 8.65 • —
l.c.l., frt. equald 100 lbs. 9.05 • 9.65
cryst., bgs., c.l., t.l., frt. equald 100 lbs. 4.40 • —
l.c.l., frt. equald 100 lbs. 4.80 • 5.40
Sodium phosphates in dms., 60c. higher than bgs.
Prussiate, yellow (see sodium ferrocyanide).
Pyrophosphate, acid, bgs., c.l., works frt. equald 100 lbs. 10.60 • —
l.c.l., works ..... 100 lbs. 11.35 • 11.60
ferric, dms., 1,500-lb. lots, works lb. .38½ • —
smaller lots, works ..... lb. .41½ • .43½
tetrabasic, anhyd., bgs., c.l., works, frt. equald 100 lbs. 7.52½ • —
l.c.l., frt. equald .... 100 lbs. 7.92½ • 8.52½
Salicylate, USP, dms ..... lb. .71 • .74
powd. dms lb. .47 • .48
Sesquicarbonate, bgs., c.l., works. 100 lbs. 2.25 • —
l.c.l., dlvd., zone 1 .... 100 lbs. 4.00 • 4.25
zone 2 ..... 100 lbs. 4.25 • 4.50
zone 3 ..... 100 lbs. 4.65 • 4.80
zone 4 ..... 100 lbs. 5.25 • 5.50

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Sesquisilicate, hydrated, bgs., c.l., works 100 lbs. 4.80 • —
l.c.l., works ..... 100 lbs. 5.15 • —
dms., c.l., works ..... 100 lbs. 5.30 • —
l.c.l., works ..... 100 lbs. 5.65 • —

Sodium silicate, liq., 40° Be, 1:3.2, turbid, dms., c.l., works 100 lbs. 1.45 • —
l.c.l., works 100 lbs. 1.80 • 2.30
tanks, works ..... 100 lbs. 1.10 • —
47° Be, turbid, 1:2.9, dms., c.l., works 100 lbs. 2.10 • —
l.c.l., works ..... 100 lbs. 2.70 • 2.95
tanks, works ..... 100 lbs. 1.75 • —
52° Be, turbid, 1:2.4, dms., c.l., works 100 lbs. 2.45 • —
l.c.l., works .... 100 lbs. 2.80 • 3.30
tanks, works .... 100 lbs. 2.10 • —
solid, 1:3.2, bgs., works .... ton 62.50 • —
Silicofluoride, bgs., c.l., works lb. .075 • —
l.c.l., works ..... lb. .079 • —
Sodium silicofluoride in dms., 0.4c. per lb. higher.
Stannate, dms., works, frt. alld. E lb. .566 • .620
Sulfa drugs (see Sulfa name).
Sulfanilate, bbls., works ..... lb. .22 • —
Sulfate, NF, VII, dried, powd., dms lb. .22½ • —
tech., anhyd., bgs., c.l., dlvd. E ton 52.00 • —
detergent, rayon grade, bgs., c.l., works ton 34.00 • —
bulk, c.l., works ton 31.00 • —
USP, cryst., fib. dms ..... lb. .17½ • .18
gran., fib. dms ..... lb. .17½ • .18
Sulfhydrate, flake, 70-72%, dms., c.l., works lb. .06½ • —
l.c.l., works ..... lb. .07½ • —
liq., 40-44%, tanks, works, 100% basis ton 115.00 • —
Sulfide, flake, dms., c.l., works, E., frt. equald lb. .05¼ • —
l.c.l., same basis ..... lb. .06¼ • —
fused, bbls., c.l., works E., frt. equald lb. .04¾ • —
l.c.l., same basis ..... lb. .05¼ • —

Sodium sulfite, anhyd., bgs., c.l. 100 lbs. 3.00 • —
l.c.l., same basis ..... 100 lbs. 3.50 • —
Sulfocyanide CP (see Sodium thiocyanate).
Tetraborate (see Borax).
Tetrasulfide, liq., 40%, dms., c.l., works lb. .03½ • —
l.c.l., works lb. .04½ • —
Thiocyanate, CP, dms ..... lb. .55 • .65
tech., anhyd., 1 ton lots or more, works lb. .317 • —
less than ton lots, works lb. .337 • —
Thiosulfate, NF, cryst., bbls lb. .12½ • —
tech. (see Sodium hyposulphite).
Titanate, ctns., c.l., works ..... lb. .10½ • —
5-ton lots, works ..... lb. .10¾ • —
1-ton or less, works ..... lb. .11 • —
Toluene sulfonate, dms., c.l., or t.l. lb. .38 • —
l.c.l. ..... lb. .42 • —
Trichloroacetate, 90%, 100-lb. dms., c.l., frt. alld. E lb. .37½ • —
l.c.l., frt. adjusted, E ... lb. .39½ • —
50 lb. dms., c.l., frt. alld E. lb. .38 • —
l.c.l., frt. adjusted E . lb. .40 • —
10-lb. cns., c.l., frt. alld. E. lb. .44 • —
l.c.l., frt. adjusted E .... lb. .46 • —
Prices on Sodium trichloroacetate W. of the Rockies are 1¾c. per pound higher.
Tripolyphosphate, bgs., c.l., works, frt. equald 100 lbs. 7.87½ • —
l.c.l., same basis ..... 100 lbs. 8.27½ • 8.87½

Sodium trisilicate, powd., 1:3.2, bgs., c.l., works 100 lbs. 8.65 • —
l.c.l., works ..... 100 lbs 9.40 • 9.80
dms., c.l., works .... 100 lbs 9.05 • —
l.c.l., works ..... 100 lbs 9.80 • 10.40
Tungstate, tech., kgs., dlvd. E lb. 2.15 • —
Sodium-ammonium phosphate, bbls., works, frt. equald lb. .23 • —
Sodium carboxymethyl cellulose (see CMC).
Sodium-cinchophen (see Cinchophen-sodium).
Sodium-formaldehyde sulfoxylate, dms., c.l., dlvd lb. .21 • —
l.c.l., same basis ..... lb. .21½ • —
Sodium-zirconyl sulfate, fiber dms., 1,000-lb lots or more works lb. .28 • —
smaller lots, same basis lb. .30 • —
Solvent naphtha, coaltar, high flash, tanks, frt. equald gal. .31 • .32
petroleum (see Petroleum solvent, partial aromatic).
Sorbitan monostearate, fib. dms., 20,000-lb. lots, works lb. .32 • —
10,000 to 20,000-lb. lots, works. lb. .34 • —
smaller lots, works ..... lb. .37 • .39
Tristearate, fib. dms., 20,000-lb. lots, works lb. .33 • —
10,000 to 20,000-lb. lots, works. lb. .35 • —
smaller lots, works ..... lb. .38 • .40

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Toronto 7, Ontario, Canada
WAlnut 2-5103

VANCOUVER, B. C.
***Van Waters & Rogers, Inc.
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NAME OF WAX	MELTING POINT ASTM D-127-30	PENETRATION 100G/77°/ 5 SEC.	COLOR N P A	ACID NUMBER	SAPONIFICATION VALUE	TYPE
CARDIS ONE (U.S. Pat. No. 2471102)	195-200	1-2	4-5	12-16	55-65	EMULSIFIABLE PETROLEUM WAX
CARDIS* 314	184-189	4-6	4-5	13-16	45-55	EMULSIFIABLE PETROLEUM WAX
CARDIS* 319	180-185	5-7	4-6	18-20	65-70	EMULSIFIABLE PETROLEUM WAX
CARDIS* 320	180-185	5-7	4-5	28-30	75-80	EMULSIFIABLE PETROLEUM WAX
CARDIS* 262	195-200	3-5	BROWN	14-17	40-45	SPECIALLY PROCESSED PETROLEUM WAX
FORTEX*	190-200	3-5	2½-3½	0.0	0.0	MICRO-CRYSTALLINE HARD AND PLASTIC
MEKON* B-20 A-20 Y-20	190-195 190-195 190-195	3-5 3-5 3-5	BROWN-BLACK AMBER-6 MAX. YELLOW-3-3½	0.0	0.0	MICRO-CRYSTALLINE HARD AND BRITTLE
POLYMEKON**	200-MIN.	0-3	YELLOW	0.0	0.0	SPECIALLY PROCESSED PETROLEUM WAX
WARCO* WAX 150-A	145-155 145-155	15-20 15-20	YELLOW 1-2 BROWN	0.0	0.0	MICRO-CRYSTALLINE PLASTIC
WARCO* WAX 170-A	170-175	10-15	YELLOW 1-2	0.0	0.0	MICRO-CRYSTALLINE PLASTIC
WARCO* WAX 180	180-185 180-185	4-7 4-7	WHITE BROWN	0.0	0.0	MICRO-CRYSTALLINE HARD AND BRITTLE
WARCOSINE*	150-155	15-20	WHITE	0.0	0.0	MICRO-CRYSTALLINE PLASTIC
PARAFFIN	136-138 ASTM	FULLY REFINED				CRYSTALLINE
CANE WAX 700	169-174	1.0-1.5	BROWN	25-30	70-90	VEGETABLE WAX
CANE WAX 500	171-176	3 MAX.	LIGHT BROWN	25-35	55-70	VEGETABLE WAX
CANE WAX 517-711	170-175	2 MAX.	BLACK	—	—	VEGETABLE WAX

*®
**Patent Applied For.

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Sorbitol, cryst., resin grade, pellets, dms., c.l., works lb. .23 - —
1 to 5-ton lots, works lb. .25 - .26
powd., dms., 1 to 5-ton lots, works lb. .38 - .39
soln., coml., aqueous, dms., c.l., works lb. .24¼- —
ton lots, works lb. .25 - —
smaller lots, works lb. .25¼- —
tanks, works lb. .23¼- —
reg. 70% aqueous, dms., c.l., works lb. .16 - —
ton lots, works lb. .16¾- —
smaller lots, works lb. .17 - —
tanks, works lb. .15 - —
Soybean meal, 44%, bulk, Decatur. ton.61.00 - —
protein, chemically isolated, bgs., c.l., works lb. .23 - —
mechanically refd., bgs., l.c.l., works lb. .066 - —
Sparteine sulfate, cns oz. .80 - .85
Spearmint leaves, dom., bls lb. .75 - —
Spruce extract, liq., reg. tanks, works lb. .01¾- —
powd., super, bgs., c.l., works lb. .05¼- —
l.c.l., works lb. .05½- —
Squill, white, bls lb. .16 - .18
powd., bbls., bxs lb. .17 - .20
St. John's bread, edible, bls lb. .13 - .15
Stannic chloride, anhyd., dms., works lb. .781 - .791
Oxide, dms., dlvd. E lb. 1.00 - 1.01
Stannous chloride, anhyd., dms., works lb. .903 - 1.171
hydrous, cryst., dms., works. lb. .79 - .80
Sulfate, dms., works lb. .958 - .978
Starch, corn, pearl, paper bgs., c.l., 100 lbs. 7.17 - —
l.c.l. 100 lbs. 7.32 - —
powd., paper bgs., c.l. 100 lbs. 7.29 - —
l.c.l. 100 lbs. 7.44 - —
Prices for corn starch in cotton bags, 15c. per 100 lbs. higher.
Potato, dom., Idaho, bgs., c.l., works lb. .06 - —
Maine, bgs., c.l., works lb. .07½- .07¾
ex whse, N. Y. lb. .08½- .09½
Rice, bgs., l.c.l. lb. .15½- .16
Wheat, bgs lb. .08½- .09
Star root (see Helonias root).
Stargrass Root (see Aletris root).
Stavesacre seed, bgs lb. .60 - .61
Stearine oleo (see Oleostearine).
Stramonium leaves, bgs. lb. .18 - .20
Streptomycin hydrochloride, bulk, gram. .07 - .0745
Stronium bromide, NF, cns., dms. lb. .75 - .83
Carbonate, pure, dms., 5-ton lots or more, works lb. .35 - —
1-ton lots, works lb. .37 - —
tech., dms., works lb. .19 - —
Chromate, bbls., works lb. .46 - —
Iodide, pars, 25-lb. lots lb. 3.[illegible] - —
Nitrate, bbls., c.l., works 100 lbs. 11.00 - —
l.c.l., works 100 lbs. 12.00 - —
Salicylate, NF, dms lb. 1.78 - —
Sulfate, air floated, 90% mesh, bgs., works ton.56.70 -66.15
Strophanthin, K., bots. oz.25.00 -25.50
G. (see Ouabain, USP).
Strophanthus seed, Kombi, biologically tested, bgs lb. 3.50 - 3.75
Strychnine, NF, powd., cns., 100-oz. lots oz. 1.10 - —
Phosphate, NF, cns., 100-oz. lots oz. 1.14 - —
Sulfate, USP, cryst., cns., 25-oz. lots oz. .96 - —
powd., 100-oz. lots oz. .85 - —
Styrax, USP cs lb. .78 - .80
Styrene monomer, polymer grade, 99½%, dms., c.l., frt. alld. lb. .22½- —
l.c.l., same basis lb. .23½- —
tanks, same basis lb. .20½- —
synthetic rubber grade, 99%, dms., c.l., frt. alld. lb. .18½- —
l.c.l., same basis lb. .19½- —
tanks, same basis lb. .16½- —
Styroiyl acetate, bots lb. 1.45 - 1.70
Sucrose, crude, bgs., dlvd., N. Y. lb. .0555- —
refd., white, bgs., refy., E lb. .0855- —
Octa-acetate, denaturing grade, 100-200-lbs., bgs., l.c.l., works lb. .76 - —
Sugar (see Sucrose, crude, refined).
Sulfabenzamide, dms lb. 4.00 - 4.50
Sodium, dms lb. 4.10 - 4.60
Sulfacetamide, fib. dms lb. 4.00 - 4.20
Sodium fib. dms lb. 5.00 - 5.20
Sulfadiazine, USP, microcrystals, dms. lb. 10.60 -11.10
powd., dms lb. 10.25 -10.75
Sulfadiazine-sodium, USP, dms lb. 11.25 -11.75
microcrystals, dms. lb. 11.60 -12.10
Sulfaguanidine, USP dms lb. 2.50 - —
Sulfamerazine, USP, microcrystals. lb. 10.65 -11.15
Sulfamerazine-sodium, USP, dms., lb. 11.25 -11.75
Sulfamethazine, microcrystals, dms., lb 8.90 - 9.40
powd., dms lb. 8.50 - 9.00
Sulfanilamide, USP 30-80 mesh., dms lb. 1.40 - 1.60
microcrystals, dms lb. 1.70 - 1.90
powd. dms lb. 1.30 - 1.50
Quinoxaline, veterinary, dms lb. 6.40 - 6.75
Sulfapyridine, NF powd. bots. tins. lb. 7.00 - 7.50
Sulfapyridine-sodium, monohydrate, dms lb. 7.50 - 8.00
Sulfathiazole, USP, microcrystals, dms lb. 2.85 - 3.00
powd. dms lb. 2.50 - 2.65
Sulfathiazole-sodium, USP, dms lb. 2.75 - 2.90
Sulfur, coml. flour bgs., mines 100 lbs. 2.30 - —
bbls., mines 100 lbs. 3.05 - —
lump, bgs., mines 100 lbs. 2.20 - —
bbls. mines 100 lbs. 2.65 - —
crude, bulk, c.l., mines, contract, long-ton.26.50 - —
export, f.o.b. vessels, Gulf ports long-ton.28.00 -31.00
domestic and Canada, f.o.b. vessel Gulf port long-ton.28.00 - —
refd., flowers, USP, bgs., mines. 100 lbs. 4.00 - —
bbls. 100 lbs. 5.25 - —
flour, light bgs., mines 100 lbs. 3.60 - —
bbls., mines 100 lbs. 4.50 - —
lump, bgs., mines 100 lbs. 3.30 - —
rolls, bgs., mines 100 lbs. 3.85 - —
bbls., mines 100 lbs. 4.40 - —
salt block, bgs. mines 100 lbs. 3.50 - —
virgin block, bbls., mines. 100 lbs. 3.45 - —
rubbermakers, coml., reg., bgs., mines 100 lbs. 2.40 - —
bbls., mines 100 lbs. 3.55 - —
98-100% passing through 325 mesh, bgs., mines 100 lbs. 2.50 - —
bbls., mines 100 lbs. 3.65 - —
refd., bgs., mines 100 lbs. 3.25 - —
bbls. mines 100 lbs. 4.30 - —
treated, 2.5% mineral oil, bgs., mines 100 lbs. 2.70 - —
bbls., mines 100 lbs. 3.85 - —
10% pine tar, bgs., mines. 100 lbs. 3.90 - —
Sulfur bichloride, dms., c.l., works, frt. equald. lb. .04 - —
l.c.l. same basis lb. .04¾- —
tanks, same basis lb. .03¾- —
Dioxide, liq., coml., cyls., works, frt. equald. lb. .10 - .12
multi unit cars, works lb. .0535- —
tanks, works lb. .045 - —
refrigeration, 150-lb. cyls., dlvd. lb. .30 - —
Monochloride, 55-gal., dms., c.l., frt. equald. lb. .04 - —
l.c.l., same basis lb. .04¾- —
tanks, same basis lb. .03¾- —
Sumac leaves, 28% tannin, bgs., ex-dock ton.132.00 - —
ground, bgs., ex-dock ton.127.00 - —
Superphosphate, run-of-pile, under 22% a.p.a. pulv., bulk, c.l., Balto. unit-ton. .88 - .91
Carteret, N. J. unit-ton. .88 - .91
triple 48% or more a.p.a., pulv., bulk, c.l., East Tampa, Fla., unit-ton. .98 - —

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2,4,5-T, dms., c.l., works, frt. equald. lb. 1.18 - —
l.c.l., same basis lb. 1.25 - —
Isopropyl ester, dms., c.l., works, frt. equald. lb. 1.24 - —
l.c.l., works lb. 1.29 - —
Talc, dom., ord., Calif., grd., bgs., c.l., works ton.33.00 -39.50
Vermont off color grd., bgs., c.l., works ton.19.40 - —
l.c.l., works ton.37.00 - —
fibrous, New York, grd., bgs., c.l., works ton.28.00 - —
l.c.l., works ton.31.00 -36.00
99.5% 325 mesh, bgs., c.l., works ton.31.00 - —
l.c.l., works ton.34.00 - —
99.95% micronized, bgs., works ton.38.00 - —
Imp., Canadian, grd., bgs., c.l., mines ton.20.00 -25.00
Tallow, edible, tanks, dlvd lb. .12 - —
inedible, extra, tanks, dlvd lb. .07⅜- —
fancy, bleachable, tanks, dlvd., lb. .07½- —
guaranteed, dms., f.a.s. lb. .09¼- .09¼
No. 1, tanks, dlvd lb. .07⅛- —
special tanks, dlvd lb. .07⅜- —
sulfonated, 25%, bbls., l.c.l. lb. .08¾- .09
50%, bbls., l.c.l. lb. .09¾- .10¼
Tankage, animal, feeding, 9-11% ammonia, bulk unit-ton. 4.25 - —
Chicago, bulk unit-ton. 5.50 - —
Tapioca flour, Brazilian, bgs., ex whse lb. .08½- .10
Tar acid oil, 15-18%, dms., c.l., frt. equald. gal. .47 - .49
l.c.l., same basis gal. .50 - .51
tanks, same basis gal. .39 - —
25-28%, dms., c.l., same basis, gal. .54 - .56
l.c.l., same basis gal. .57 - .58
tanks, same basis gal. .46 - —
50-53%, dms., c.l., same basis, gal. .70 - .72½
l.c.l., same basis gal. .73½- .74½
tanks, same basis gal. .62½- —
Coal (see Coaltar).
Tartar, emetic (see Antimony-potassium tartarate).
Terpine glycol ether, dms., c.l., works lb. .23½- —
l.c.l., works lb. .25½- —
tanks, works lb. .22 - —
Hydrate, NF, cryst., powd., fib. dms lb. .67½- .74
Terpineol, dms., l.c.l, dlvd. E lb. .20¾- —
extra, dms lb. .41 - .60
prime, dms lb. .30 - .45
Terpinyl acetate, extra, cns., dms. lb. .60 - .75
prime, dms lb. .55 - .70
Propionate, dms lb. 1.75 - 2.00
Terra alba (see Gypsum).
Testosterone, USP, 100-gm. lots, bots gram. .70 - —
Propionate, USP, 100-gm. lots, bots gram. .68 - —
Tetrachloroethane, dms., works lb. .14½- —
Tetrasodium pyrophosphate (see Sodium pyrophosphate).
Tetrachloroethylene, tech (see Perchloroethylene).
USP 55 gal. dms., works lb. .20½- .21½
smaller dms., works lb. .23½- .25
Tetraethyl orthosilicate, dms., c.l., dlvd. E lb. .61½- —
l.c.l., dlvd. E lb. .62½- —
Pyrophosphate, 40%, cns., dms., frt. equald lb. .75 - —
Tetraethylenepentamine, dms., c.l., dlvd. E lb. .49 - —
l.c.l., dlvd. E lb. .50 - —
tanks, dlvd. E lb. .47 - —
Tetrahydrofuran, dms., c.l., or t.l., works lb. .36½- —
l.c.l., or l.t.l., works lb. .37 - —
tanks, works lb. .35 - —
Tetrapotassium phosphate (see Potassium phosphate).
Thallium metal, dlvd lb.12.50 -15.00
Sulfate, 99%, bots., dlvd lb. 8.00 -13.00
Theobromine, NF, fib. dms lb. 3.25 - —
And sodium acetate, USP, fib. dms lb. 4.00 - —
Sodio-Salicylate, NF, fib. dms lb. 3.30 - —
Theophylline, anyhd. or USP, 100-lb. dms lb. 3.65 - —
Thiamine hydrochloride, USP, regular or ampul-type, fib. dms. lar fib. dms kilo.60.00 - —
ampule grade kilo.62.00 - —
Mononitrate, USP, fib. dms kilo.62.00 - —
Thiocarbanilide, dms., ton lots lb. .72 - —
less tons lots lb. .74 - —
Thiodiphenylamine (see Phenothiazine).
Thiourea, tech., dms., c.l., frt. alld. lb. .36 - —
l.c.l., works lb. .38 - —
Thorium nitrate, purif., fig. dms., 100-lb. lots or more, works lb. 3.50 - —
dl-Threonine, bots., 1-kilo lots, kilo.450.00 -500.00
Thyme leaves, French, bgs lb. .19 - .22½
Spanish, bgs. lb. .09 - —
Thymol, fib. dms lb. 2.50 - 2.75
Iodide, NF, dms. lb. 7.30 - —
Timbo root (see Cube root)
Tin chloride (see Stannous chloride, anhydrous).
crystals (see Stannous chloride, hydrous).
Oxide (see Stannic oxide).
Metal (Straits) lb. .97½- —
Sulfate (see Stannous sulfate).
Tetrachloride, anhyd., (see Stannic chloride, anhydrous).
Titanium dioxide anatase, chalk-resistant, bgs., c.l., dlvd. lb. .24½- —
l.c.l., dlvd. lb. .25½- —
ceramic, bgs., c.l., dlvd. lb. .22½- —
l.c.l., dlvd. lb. .23½- —
reg., bgs., c.l., dlvd lb. .22½- —
l.c.l., dlvd. lb. .23½- —
Titanium dioxide, metallurgical, nat., gran., bgs., c.l., f.o.b. Jacksonville, Fla. ton.120.00 - —
Niagara Falls, N. Y., c.l., ton.137.50 - —
5-ton lots ton.142.50 - —
ton lots ton.147.50 - —
rutile, nonchalking, bgs., c.l., dlvd. E. lb. .26½- —
l.c.l., dlvd. E. lb. .27½- —
Milled titanium dioxide, $7.50 per ton higher.
Hydride, cns., works lb. 7.95 - 9.00
Pigment, calcium-rutile base, reg., bgs., c.l., dlvd. lb. .09¼- —
l.c.l., works lb. .09¾- —
high-tinting, dms., c.l. lb. .09 - —
l.c.l. lb. .09½- —
Tetrachloride, tech., dms., c.l., works lb. .40¾- —
l.c.l., works lb. .43¾- —
tanks, works lb. .39¾- —
dl-a-Tecopherol, bots. kilo.149.65 - —
Acetate kilo.136.00 - —
d-a-Tocopherol acetate kilo.185.00 - —
d-a-Tocopherol acid succinate kilo.165.00 - —
o-Tolidine, base, paste, 100% basis, kgs lb. 1.35 - —
Dry, 100% basis, kgs lb. 1.40 - —
Hydrochloride, paste, 100% basis. lb. 1.35 - —
Tolu balsam, cns lb. 4.25 - 4.50
Toluene (see Toluol).
p-Toluenesulfonamide, powd., dms., works lb. .70 - —
m-Toluidine, dms., c.l., works, frt. alld lb. .79 - —
l.c.l., same basis lb. .80 - —
tanks, same basis lb. .78 - —
o-Toluidine, dms., c.l., works, frt. alld lb. .23 - —
l.c.l., same basis lb. .24 - —
tanks, same basis lb. .22 - —
p-Toluidine, flake, dms., frt. alld lb. .64 - —
solid, dms., frt. alld lb. .60 - .61
Toluol, coaltar, indust. or nitration, tanks, works:—
Bethlehem, Pa. gal. .34 - —
Birmingham dist gal. .32 - —
Chicago, dist gal. .32 - —
Cleveland dist gal. .32 - —
Geneva, Utah gal. .26 - —
Johnstown, Pa gal. .32 - —
Lackawanna, N. Y. gal. .35 - —
Lone Star, Tex gal. .33 - —
Lorain, Ohio gal. .32 - —
Middletown, Ohio gal. .33½- —
Minnequa, Colo. gal. .32 - —
Philadelphia dist gal. .34 - —
Pittsburgh dist gal. .32 - —
Sparrows Point, Md. gal. .34 - —
Terre Haute, Ind gal. .35 - —
Youngstown, Ohio gal. .32 - —
petroleum, indust., 2°, tanks, works:—Albany, N. Y. gal. .35 - —
Bayonne, N. J. gal. .34 - —
Baytown, Tex. gal. .33 - —
Chicago, Ill. gal. .35 - —
Detroit, Mich gal. .35 - —
Houston, Tex gal. .33 - —
Philadelphia, Pa. gal. .34 - —
Providence, R. I. gal. .35 - —
Wood River, Ill. gal. .35 - —
2,4-Tolylenediamine, cryst., fib. dms., c.l., frt. alld. lb. .97 - —
l.c.l., frt. alld lb. 1.00 - —
powd., fib. dms., same basis lb. 1.04 - —
Tonka beans, Angostura, cks lb. 1.65 - 1.80
Brazilian, Surinam, cs lb. 1.00 - 1.25
Totaquine, 100-oz. lots, cns oz. .42 - —
Toxaphene, dms., c.l., t.l., works. lb. .21 - —
l.c.l., l.t.l., works lb. .27 - —
Triacetin, dms., c.l., dlvd. E. of Rockies lb. .39 - —
l.c.l., same basis lb. .40 - —
tanks, same basis lb. .37 - —
Tributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .42 - —
l.c.l., frt. alld. E. of Denver, lb. .43 - —
tanks, frt. alld. E. of Denver, lb. .40 - —
Phosphate, dms., c.l., works lb. .52 - —
l.c.l., same basis lb. .53 - —
tanks, same basis lb. .50 - —
Tributylamine, cms., c.l., works lb. .67 - —
l.c.l., same basis lb. .68 - —
tanks, same basis lb. .65 - —
Trichlorobenzene, dms., c.l., frt. alld. E lb. .14½- —
l.c.l., frt. alld. E lb. .15½- —
tanks, frt. alld. E lb. .13 - —
Prices in the West 1¾c. higher.
Trichloroethylene, dms., c.l., or t.l., works, frt. equald. lb. .11¾- —
l.c.l., dlvd. E lb. .13¾- —
tanks, works, frt. equald lb. .10¾- —
1,1,1-Trichloroethane, dms., c.l., works. lb. .13½- —
l.c.l., works lb. .16¼- —
tanks, works lb. .12½- —
Tricholine citrate, 65% soln., ret. cbys., works, frt. adjusted lb. 1.40 - 1.45
Tricresyl phosphate, coaltar, dms., c.l., dlvd. lb. .36½- —
l.c.l., dlvd. lb. .37½- —
tanks, dlvd. lb. .34½- —
petroleum, dms., c.l., dlvd. lb. .36½- —
l.c.l., dlvd. lb. .37½- —
tanks, dlvd. lb. .34½- —
Triethanolamine, dms., c.l., dlvd. E lb. .24 - —
l.c.l., same basis lb. .25 - —
tanks, same basis lb. .22 - —
Triethylamine, dms., c.l., works, dlvd. E lb. .47 - —
tanks, same basis lb. .45 - —
Triethyl citrate, refd., tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .45¾- —
l.c.l., frt. alld. E. of Denver, lb. .46¾- —
tanks, frt. alld. E. of Denver, lb. .43¾- —
Phosphate, dms., c.l., dlvd. lb. .40 - —
l.c.l., dlvd. lb. .41 - —
tanks, same basis lb. .38 - —
Triethylene glycol, dms., c.l., dlvd. E lb. .20½- —
l.c.l., same basis lb. .21½- —
tanks, same basis lb. .18½- —
Triethylenetetramine, dms., c.l., dlvd. E lb. .49 - —
l.c.l., dlvd. E lb. .50 - —
tanks, dlvd. E lb. .47 - —
Tri-isopropanolamine, dms., c.l., dlvd. E. lb. .22¾- —
l.c.l., dlvd. E lb. .23¾- —
tanks, dlvd. E lb. .20¾- —
Trimethylamine 25-40% soln., dms., c.l., works, frt. equald., 100% basis lb. .42 - —
l.c.l., works, frt. equald., 100% basis lb. .42½- —
tanks, works, frt. equald., 100% basis lb. .33 - —
Trioxane, pure, dms., c.l., t.l., dlvd. E. lb. .50 - —
l.c.l., dms., dlvd. E. lb. .51½- —
Tripentaerythritol, bgs., l.c.l., works. lb. .36 - —
Triphenyl phosphate, bbls., c.l., frt. equald. lb. .40 - —
Triphenylguanidine, bbls., works. lb. .90 - —
Tripropylene glycol, dms., c.l., frt. alld E lb. .20¼- —
l.c.l., frt. alld. E lb. .21½- —
Prices 1c. per lb. higher in West.
Trisodium fluoroacetate (see Sodium fluoroacetate, tribasic).
Phosphate (see Sodium phosphate tribasic).
dl-Tryptophane, fib. ctns., works, kilo.165.00 - —
Tungsten metal powd., 98.8%, dms., dlvd. lb. 4.50 - —
Turpentine, gum (see Protective Coatings market, Naval Stores).
Tyrothricin, USP, bots. gram. .75 - .85
l.c.l., frt. equald lb. .41 - —

U

Unicorn root, false (see Helonias root).
True (see Aletris root).
Urea, 46% N, indust., bgs., c.l., t.l., dlvd. E. ton.120.00 - —
l.c.l., dlvd. E, ex whse. ton.140.00 - —
45% N, agricultural, bgs., c.l., (30 tons), dlvd., E ton.105.00 - —
Urea-ammonia liquor, A and B grades, N basis, tankcars, Belle, W. Va. ton.126.00 - —
Urea-ammonia, liquor, C grade, tankcars, same basis ton.124.50 - —
37 grade tankcars, same basis. ton.153.00 - —
Urethane, USP, dms lb. 1.45 - —
Uva-ursi leaves, bls lb. .12 - .14

V

Valerian root, Belgian, bgs. lb. .32 - —
dl-Valine, dms., works lb.21.00 -27.50
Valonia beards, 40-42% tannin, bgs., ex dock ton.75.00 -76.00
cups, 28-30% tannin, bgs., ex-dock ton.58.00 - —
extract, powd., 63% tannin, bgs., ex-dock, duty extra lb. .08½- —
Vanadium pentoxide, tech., dms., works lb. 1.28 - 1.33
Vanilla beans, Bourbon, tins lb. 6.50 - 7.00
Mexican, cuts, tins lb. 6.75 - 7.00
whole, tins lb. 7.50 - 8.00
Tahiti, cs. lb. 6.00 Nom.
Vanillin, ex eugenol, tins, 25-lb. lots. lb. 6.50 - 6.75
smaller lots lb. 6.90 - 7.25
ex lignin, dms., 100-lb. lots lb. 2.75 - —
smaller lots lb. 2.80 - 2.85
Vinyl acetate monomer, 55-gal. dms., c.l., dlvd. E lb. .18½- —
l.c.l., dlvd. E lb. .19½- —
tankcars, dlvd. E lb. .16½- —
tanktrucks, less than 4,000 gal., dlvd. E lb. .17½- —
n-Butyl ether, tech., dms., c.l., works lb. .28 - —
l.c.l., works lb. .30 - —
tanks, works lb. .27 - —
Chloride monomer, tanks, works lb. .11 - .12
Ether, USP, anasthesia, bots., 50 c.c., hospitals, bot 1.12 - —
75 c.c. bot. 1.56 - —
tech., dms., c.l., works lb. .26 - —
l.c.l., works lb. .28 - —
tanks, works lb. .25 - —
Isobutyl ether, tech., dms., c.l., works lb. .28 - —
l.c.l., works lb. .30 - —
tanks, works lb. .27 - —
Methyl ether, cyls., works lb. .23 - —
tanks, works lb. .20 - —
Cylinders are sold outright, or if shipped against deposit, a free period of 60 days is allowed; and if empties are returned prepaid and in good condition within that period, full refund is made.
Propionate monomer, dms., c.l., dlvd. lb. .49 - —
l.c.l., same basis lb. .50 - —
tanks, same basis lb. .47 - —
Trichloride (see Trichloroethane).
2-Vinylpyridine, 10 dms. to tanks, works lb. 1.40 - —
1 to 9 dms, works lb. 1.50 - —
tanks, works lb. 1.38 - —
Vinyltoluene, dms., c.l., frt. alld. lb. .18½- —
l.c.l., frt. alld. lb. .19½- —
tanks, frt. ald lb. .16½- —
Viosterol, in alcohol, 1,000,000 D units per gram, bots., lots of 10 billion USP units, 1,000,000 units. .025 - —
lots of 1 billion USP units, 1,000,000 units. .03 - —
lots of less than 1 billion USP units, 1,000,000 units. .035 - —
in nat., vegetable oil, 400,000 to 1,000,000 D units per gram, bots., lots of 10 billion USP units, 1,000,000 units. .02 - .04¾
lots of 1 billion USP units, 1,000,000 units. .025 - .05¼
lots of less than 1 billion USP units, 1,000,000 units. .03 - .05¾
Vitamin A acetate, syn., crystalline, beads, 500,000 A units per gram gram. .07¼- —
dry, 500,000 units per gram, kilo lots kilo.67.50 - —
325,000 units per gram, same basis kilo.43.88 - —
250,000 units per gram, same basis kilo.33.75 - —
Dry vitamin A acetate in less than kilo lots, $2.50 per kilo higher in all potencies.
liq., in oil, 1,000,000 A units per gram 1,000,000 units. .10 - —
Palmitate, liq., 1,000,000-1,800,000 A units per gram 1,000,000 units. .10 - —
in oil, 1,000,000 A units per gram 1,000,000 units. .10 - —
B_1 (see Thiamine hydrochloride).
B_2 (see Riboflavin).
B_{12} complex natural (see Rice bran concentrate and Yeast).
B_{12} crystalline, 1-gram or 5-gram vials gram.245.00 - —
oral grade solids, in containers of 1 and 5 grams of B_{12} activity gram.185.00 - —
C (see Acid, ascorbic).
D (see Oils, codliver and fish-liver Calciferol, and Viosterol)
D_2, dry 850,000 units per gram, kilo lots kilo.42.50 - —
less than kilo lots kilo.45.00 - —
E (see a-Tocopherol and Oil, wheat germ).
G (see Riboflavin).
H (see Biotin).
K Active (see Menadione).
K_1, 25 gram bots gram. 4.50 - —
Violet methyl toner (see Blue methylviolet toner)
V.M.&P. naphtha (see Petroleum naphtha).

W

Wahoo root, bark, bls. lb. 2.25 - —
Warfarin, 0.5%, dms., 50-lb. lots, dlvd lb. 1.95 - —
25-49-lb. lots, N. Y. or Chicago. lb. 2.05 - —
5-24-lb. lots, cns., N. Y. or Chicago lb. 2.15 - —
Wattle bark, fair average, African, bales, ex dock ton.99.00 - —
merchantable, bales, ex dock. ton.96.00 - —

Wattle extract, liq., 35% tannin, bbls.	lb.	.09¾	.10
solid, E. Africa, 60% tannin, bgs., ex dock, duty extra	lb.	.09¾	—
S. Africa, 60% tannin, bgs., ex dock, duty extra	lb.	.10	—
Wax, amorph. (see Wax microcrystalline).			
Bayberry, bgs	lb.	.45	.47
Bees, crude, African, bgs	lb.	.68	.70
Brazilian, bgs.	lb.	.70	.72
Central American, bgs.	lb.	.69	.70
Chilian, bgs.	lb.	.70	.72
refd., USP, bleached, white bricks, 100-lb. ctns.	lb.	.80	.82
slabs, 100-lb. ctns	lb.	.79	.81
yellow bricks, 100-lb. ctns.	lb.	.73	.75
slabs, 100-lb. ctns	lb.	.72	.74
Candelilla, crude, bgs	lb.	.57	.59
refd., bgs	lb.	.60	.62
Powdered candelilla, 20 mesh 7c. per lb. higher, 80 mesh 7c.; 100-200 mesh 8c.			
Carnauba, chalky, bgs., ton lots.	lb.	.75	Nom.
North country No. 2, crude, bgs., ton lots	lb.	.80	Nom.
refd., pure, bgs., ton lots	lb.	.86	.88
No. 3, Ceara, crude, bgs., ton lots	lb.	.76	.77
refd., pure, bgs., ton lots	lb.	.85	.86
tech., bgs., ton lots	lb.	.77	.78
Parnahyba, crude, bgs., ton lots	lb.	.77	.78
refd., pure, bgs., ton lots	lb.	.85	.86
yellow No. 1, Ceara, bgs., ton lots	lb.	1.31	1.33
Parnahyba, bgs., ton lots	lb.	1.33	1.35
Powdered carnauba wax price same as powdered candelilla.		differentials	
Japan, cs	lb.	.47	.48
Microcrystalline, 170-175° F., m.p., ASTM, penertation 15-20 ctns., 20,000 lbs., group 3, works.	lb.	.14	.15
smaller lots, same basis.	lb.	.15	.16
black, ctns., 20,000 lbs., same basis	lb.	.12½	.13½
smaller lots, same basis.	lb.	.13½	.14½
white ctns., 20,000 lbs., same basis	lb.	.25	.26
smaller lots, group 3, works	lb.	.26	.27
180°-185° F., m.p., ASTM, penetration, 7-11; amber, ctns., 20,000-lb. lots, same basis	lb.	.17	—
smaller lots, same basis.	lb.	.18	—
black, ctns., 20,000 lbs., same basis	lb.	.15½	—
smaller lots, same basis.	lb.	.16½	—
white, ctns., 20,000 lbs., same basis	lb.	.28	—
smaller lots, same basis.	lb.	.29	—
100°-195° F., m.p., ASTM, penetration 2-7, amber, ctns., 20,000 lbs., same basis	lb.	.21	—
smaller lots, same basis.	lb.	.21½	—
black, ctns., 20,000 lbs., same basis	lb.	.19	—
smaller lots, same basis.	lb.	.19½	—
white, ctns, 20,000 lbs., same basis	lb.	.34½	—
smaller lots, same basis.	lb.	.35½	—
Montan, dom., refd., bgs	lb.	.27	Nom.
imp., crude, Bohemian, bgs	lb.	No prices.	
German, bgs.	lb.	No prices.	
Ouricury, refd., pure, bgs	lb.	.80	.82
tech., bgs	lb.	.74	.76
Paraffin (see P)			
Spermaceti, blocks, cs	lb.	.30	.33
cakes cs.	lb.	.31	.34
Sugar cane, dom., refd., slabs, 80 lbs. ctns., works	lb.	.65	.75
spot	lb.	.67¼	.72¼
White lead (see Lead, White).			
White pine bark, rossed, bls.	lb.	.18	.19
White precipitate, USP, powd., dms.,	lb.	6.55	—
Whiting (see Calcium carbonate).			
Wild cherry bark, thin, nat., bls.	lb.	.18	.19
rossed, bls	lb.	.19	.22
Witch hazel, bark, bls	lb.	.16	.17
leaves, bls	lb.	.20	—
Wollastonite, fine, bgs., c.l., works.	ton	39.50	—
l.c.l., ex whse	ton	56.00	—
medium, bgs., c.l., works	ton	27.00	—
l.c.l., ex whse	ton	44.00	—
Woolfat, crude (see Degras), USP (see Lanolin).			
Wormseed, American, bgs.	lb.	.20	.25
Levant, bgs.	lb.	4.25	4.50

X

Xylene (see Xylol).			
Xylenol, cryst., 58°-60°C., m.p., dms., l.c.l., works	lb.	.40	—
56°-58°C., dms., l.c.l., works, frt. equald	lb.	.30	—
45°-47°C., dms., c.l., same basis,	lb.	.212	—
l.c.l., same basis	lb.	.215	—
tanks, same basis	lb.	.199	—
Fraction, b.r. 7°-9°C., dry above 227°C., dms., c.l., same basis	gal.	.96	—
l.c.l., same basis	gal.	.99	—
tanks, same basis	gal.	.85	—
dry at or below 227°C., dms., c.l., same basis	gal.	1.11	—
l.c.l., same basis	gal.	1.14	—
tanks, same basis	gal.	1.00	—
Xylidines, mixed, o-m-p, dms., c.l. or t.l., works	lb.	.39	—
l.c.l. same basis	lb.	.40	—
tanks, same basis	lb.	.38	—
Xylol, coaltar, indust., tanks, works:—			
Bethlehem, Pa	gal.	.34	—
Birmingham dist	gal.	.32	—
Chicago dist	gal.	.35	—
Cleveland dist	gal.	.34½	—
Geneva, Utah	gal.	.27	—
Johnstown, Pa.	gal.	.33	—
Lackawanna N. Y.	gal.	.35	—
Lone Star, Tex	gal.	.33	—
Lorain, Ohio	gal.	.33	—
Middletown, Ohio	gal.	.34	—
Minnequa, Colo	gal.	.34	—
Philadelphia dist	gal.	.34	—
Pittsburgh dist	gal.	.32	—
Sparrows Point, Md.	gal.	.34	—
Terre Haute Ind	gal.	.35	—
Youngstown, Ohio	gal.	.32½	—
petroleum, indust., tanks, works:—			
Bayonne, N. J	gal.	.34	—
Baytown, Tex.	gal.	.33	—
Chicago, Ill.	gal.	.35	—
Philadelphia, Pa.	gal.	.34	—
Providence, R. I.	gal.	.35	—
Wood River, Ill.	gal.	.35	—

Y

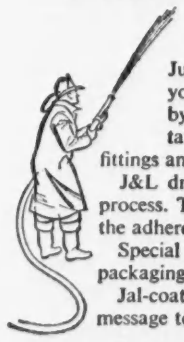
Yara yara, cns.	lb.	2.15	2.63
Yeast, brewer's, dry, USP, 50 int'l B units per gram, 100-lb. dms	lb.	.47	—
90 Int'l B units per gram, 100-lb. dms.	lb.	.52	—
Yeast, brewer's, dry, USP, 200 int'l B units per gram, 100 lb dms.	lb.	.56	—
300 int'l B units per gram, 100-lb. dms.	lb.	.60	—
Yellow, barium chromate, CP, bbls., dlvd N. of Tenn. and N. C., E. of Miss., including Davenport, Minneapolis, Rock Island, St. Louis, St. Paul	lb.	.35	—
Yellow barium chromate price differentials in other States and city zones are those for chrome yellow below.			
Benzidine, AAA, bbls., dlvd	lb.	2.10	—
AAOT, bbls., dlvd	lb.	2.85	—
Lightfast, bbls., dlvd	lb.	3.15	—
Cadmium, CP, all shades, bbls., frt. alld. E. of Rockies.	lb.	2.85	—
Selenide lithopone, all shades, bbls., frt. alld. E. of Rockies.	lb.	1.05	—
Cadmium yellows, Los Angeles and San Francisco, ex whse., 1c. per lb. higher.			
Chrome, CP, bbls., dlvd. W. of Tenn., and N.C., E. of Miss., including Davenport, Minneapolis, Rock Island	lb.	.33	.33½
Dlvd. Ala., Fla., Ga., La. (Shreveport 1½ higher); Miss., N. C., S. C., Penna., Dallas, Tex. 1¼c. higher; Ft. Worth, Tex. 1½c. higher; El Paso Tex. 2c. higher; Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph 1.6c. higher; dlvd. Pac. Coast, for Denver, Pueblo, Salt Lake City, Wichita prices are equalized with Chicago.			
Hansa, 10 g, bbls., same basis as yellow, chrome	lb.	2.25	—
G pigment, bbls	lb.	1.91	—
Yellow, iron oxide, natural, French type, bgs., c.l., works	lb.	.06	—
Peruvian type, bgs., l.c.l	lb.	.0205	.0345
pure, bgs., c.l., works	lb.	.11½	—
l.c.l., works	lb.	.11¾	—
Mercury oxide, bbls., 1,000-lb. lots	lb.	5.58	—
smaller lots	lb.	5.60	—
Ocher (see Yellow, iron oxide, natural).			
Zinc (chromate), bbls., dlvd	lb.	.27	.27½
basic, dlvd	lb.	.31	.32½
Yerba santa leaves, bls	lb.	.40	.42
Yohimbine hydrochloride, bots, tin.	oz.	4.30	4.50

Z

Zein, bgs., 36,000-lb. lots or more	lb.	.38	—
1,000 to 36,000-lb. lots, works	lb.	.40	—
smaller lots, works	lb.	.43	—
Zinc acetate, NF VIII, dms	lb.	.53	—
tech., dms., works	lb.	.27	—
Borate, bgs., c.l., dlvd. E	lb.	.192	—
l.c.l dlvd E	lb.	.202	—
Chloride, NF, gran., dms	lb.	.42	—
precipitated, powd., dms	lb.	.26	—
soln., 50%, dms., c.l., works.	100 lbs.	5.50	—
l.c.l., works	100 lbs.	6.10	—
tanks, works	100 lbs.	4.85	—
tech., fused, dms., c.l., works	100 lbs.	10.10	—
l.c.l., works	100 lbs.	10.60	—
Zinc chloride, tech., gran., 6b. dms., c.l., works	100 lbs.	10.85	—
l.c.l., works	100 lbs.	11.35	—
Chromate (see Yellow, zinc).			
Cyanide, kgs., 1,000-lb. lots or more, works	lb.	.523	—
smaller lots, works	lb.	.543	—
Dust, pigment, bbls., c.l., works.	lb.	.17½	—
l.c.l., works	lb.	.18½	—
Fluoride, bbls., works	lb.	.49	.50
Hydrosulfite, dms., c.l., frt. alld	lb.	.21½	—
l.c.l., frt. alld	lb.	.22	.37½
Metal, prime western slabs, E. St. Louis	lb.	.13½	—
New York	lb.	.14	—
Naphthenate, liq., 8% Zn., dms., frt. alld	lb.	.24½	—
10% Zn dms frt alld	lb.	.30	—
Oxide pigment, American process, lead-free, bgs., c.l., frt. alld	lb.	.14½	—
l.c.l., same basis	lb.	.15½	—
leaded, 35%, bgs., c.l., mills, frt. alld	lb.	.15½	—
l.c.l., same basis	lb.	.16½	—
50%, bgs., c.l., same basis	lb.	.15⅞	—
l.c.l., same basis	lb.	.16⅞	—
French process, coml., green seal, bgs., c.l., frt. alld	lb.	.15¾	—
l.c.l., same basis	lb.	.16¾	—
red seal, bgs., c.l., same basis	lb.	.15¼	—
l.c.l., same basis	lb.	.16¼	—

—Continued on page 79

PROTECTION is our business, too



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Health Data for the Public

The drug industry—the drug trade as a whole—has done much good work over the past few years in the direction of having the public appropriately and reliably informed on the ever-changing aspects and potentialities of health care. It has established several national agencies for the providing of such information. Those units are not yet functioning with the measure of dissemination that is essential to the effective performance of the important task for which they are designed. The coordination, correlation, and cooperation required in that connection take time to develop, especially because of the number of organizations that must be covered in that development. The progress is encouraging.

The drug trade has a very efficient system of distribution for information designed for the public. The retail drug store, although it has changed substantially in that respect — and others—over the past half-century, is still the source to which the public turns for information in matters of health. Its potentialities in that respect should be developed as speedily as possible with practicable operation. The recent fifth annual Rutgers pharmaceutical conference did something in that direction beyond what it had done in previous years. There was a goodly measure of emphasis there on the need for a well correlated, properly coordinated campaign on the part of all divisions of the trade. More than a little could have been added to that aspect of the conference if the national health information agencies had had an appropriate part in the program. Of course, those agencies are still a bit new to many of the members of the trade who promote the Rutgers conference. They will, doubtless, come in time to have the role for which they are rapidly becoming particularly fitted.

That the participation of the national information groups should be cultivated applies especially in such more publicly aimed conferences as that held annually under the auspices of the Brooklyn College of Pharmacy of Long Island University. Other teaching institutions should follow that example; and so should local trade groups everywhere. Many such groups are active in that direction; they should be given all possible encouragement and assistance from national bodies.

There is need in the drug trade for broader acquaintance with health information activities. It should have a bigger part—such as it properly deserves—in all programs. A few days after the recent Rutgers conference, there was an announcement in the Newark newspapers that a health fair would be held May 21-26 "to inform the public on health facilities available in Essex county." No pharmaceutical group was named among the sponsoring bodies. The county medical society, by which the announcement was made, is joined with the chamber of commerce—no doubt it has drug trade members—and the service for chronically ill in that connection. Certainly there is a place in such a project for a drug participant. And any such event should be given publicity through every drug store in the community. There is no way of knowing how many civic-minded druggists in Essex county, New Jersey, hung up a clipping of the newspaper item—it had an excellent legible heading.

The health fair idea is a good one. It should be promoted by the pharmacists, the physicians and the welfare agencies in every community. Each of those groups can get from their respective national organizations material contributory to the success of such undertakings. And there can be no more effective promotion of public relations for the drug trade than by way of telling the community public what it should know, can know, and wants to know about what it can get in health service—and how and where.

South America Beckons

"Reds Now Eye South America" said a New York newspaper headline about a fortnight ago. The statement was occasioned by the preparations being made by his countrymen in South America to promote the purposes of the "economic" tour of that continent to be made by the Soviet deputy premier this summer.

The reds' eyeing of South America has been going on for at least a decade, supplemented with more than a little fingering and at least some footwork. It is not much to the credit of this country that the activities have not been markedly rewarding. There is more than a little reason to believe that the "now" in the above-quoted headline fits the greater part of the knowledge possessed by those in the northern member of the hemisphere who should be better acquainted with what goes on in the southern. It may be that there is better information at least in inner political circles; but it was made clear in some of the comment at the recent Pan-American gatherings that there is not enough in business circles where it should be possessed and properly assessed and accepted for guidance. In the USA, business and government are not in the close, compulsory partnership that exists in the USSR. There is some relation and some dependence between the two; but business must do its own job in foreign fields, just as it must at home—if it desires really to get somewhere.

USA business is progressively doing more to develop the potentialities of the job it can do in South America. The resources of that continent can and will repay very much more of that doing, despite the handicap recently imposed politically by the refusal of this country to join in the proposed world pact on coffee. USA business should take a hand right there—perhaps by developing a new market for coffee by way of the popularizing of a new soft drink possessing the pep of coffee's caffeine and the flavor and aroma—but not the kick—of cafe imperiale. There are, in fact, many things that can be done with coffee, much preferable to its being used as fuel.

The USSR "economic" missionary will, quite naturally, exert his persuasiveness mainly in the progressive and promising ABC countries, all of which are striving to attract external industrial interest. There is where USA business missionaries should now be at work. Brazil is particularly ripe for such missionarying—not designed to convert anybody there to northern ways of thinking or living, but aimed at bringing benefits on the spot economically for all concerned.

Brazil is making special efforts to reduce the unfavorable balance of its foreign trade. One of those efforts is aimed at the reduction of its consumption of petroleum, the obligatory importation of which is one of the biggest factors in the unfavorable balance. In that effort, it has set out further to develop its resources for hydroelectric energy and to draw upon them for a goodly part of the power now furnished by petroleum.

Twenty-odd years ago, a German technologist who had been operating for several years in Brazil came into the OPD editorial office with some babassu nuts—the first ever seen there. He was interested in developing the many industrial applications of that material and especially desired to get machinery with which to handle the shelling, cracking, grinding, crushing, and other operations thereby involved. He was put in touch with a New York concern which had recently taken up an active interest in that connection. Today, a new push is being put in Brazil behind the industrial utilization of the babassu nut's components—uses are reported for all its parts. In connection with that project, there is again a looking for mechanical equipment, the present objective being a lower operating cost by way of the hydroelectric program.

No businessman needs to be told that it is things like that which it pays to know about and to go after. The cultural tour of Brazil, scheduled for the coming July and August, would well have a commercial counterpart—arranged by business.

Problem for Plant Food Group

A very abstruse problem in an unprecedented situation in practical economics faces the National Plant Food Institute as it prepares for its first annual convention next month. The problem may be simply stated as —"What is agriculture going to do for spending money this year and what will it do with such as it may acquire?"

It is far too much to expect anybody to have even a hazy idea of how the farmer may, or even can, go about the finding of a way to do his biggest job, the increasing of his income—something that has not been done for him at any stage of the handing out to him of federal funds. Of course, he is going to get some money out of the soil bank—if that works out better than some of the other crop-control schemes in which he has had a somewhat indefinite, never predictable part.

From the standpoint of the plant food industry, the second part of the simple statement of the problem is the puzzler. What will agriculture do with the money it gets for not utilizing all its land facilities in the customary manner? Will it buy plant food to increase the production on the acreage which is not idled, or in the conversion of acreage banked out of customary crops to the production of others?

It could produce large quantities of fresh food crops or industrial materials. But, what would it do with them? It has no appropriate marketing facilities—never has seemed to be interested in that direction with respect of any crops. It could develop such facilities. Why it has not done so is something that nobody has ever even tried to set out against the plaint of dairy farmers who cannot make enough to live on while big handlers of dairy products are progressively reporting bigger and bigger earnings.

One of the addresses at the plant food convention has some potentiality in the direction of the developing of some measure of self-help on the part of agriculture. The topic of that address is "Who Influences the Farmer?" The authors are associate professors of rural sociology in a farm state university. If their reply to their topical question encompasses as much as 50 percent of the possible answers, their hearers will get a very useful lesson toward the replacing of political misleading with the guidance which the farmer should have to make him the independent businessman that he must be to make proper use of the opportunities he has neglected under the influence of political paternalism and the resulting panhandling.

Another convention speaker will deal with the topic, "Dramatize Your Selling." It is not easy to see where there is a lesson in that for the seller of plant food. Such selling can be dramatized in the areas of its relation to lawns and flower beds. But, even under normal conditions, there is very little that is dramatically basic about the getting of fertilizer for a thousand acres of corn. In the atmosphere created by the soil bank, it would tax the talent of a Shaw to construct a drama out of the job of selling plant food which the farmer would have to put in storage which he does not have.

A United States Senator is going to tell the plant food conventioneers about "Our Nation's Role in World Tension." It is doubtful that he will have anything to say about the influences of our nation's agricultural surpluses in that connection.

Washington Talks It Over

Congress Seems Ready to Make an Election Year Break And Get Out of Washington by End of July.

By Ralph L. Cherry

Chief, OPD Washington Bureau

Unless some unforeseen hitch develops, it is now fairly certain that congress will get out of Washington by the end of July, which will give the members three solid months to campaign for reelection in November. The leaders in both political parties have set July 31 as the target date for adjournment, but have hopes that they may be able to end the session even earlier.

While much of the President's orignal program remains unacted upon at this time, there is still time to pass a good part of it before adjournment. Amendments to the social security law are being given the finishing touches by the senate finance committee and will be ready for final action shortly. The highway construction bill is soon to come up for house action and then to conference for final shaping.

Several of the President's health bills are still in the committees of the house and senate, but consideration of them has become more active and they soon may be reported for passage. His OTC bill, however, though reported to the house for passage, has advanced no further and chances of it getting through both the house and senate are remote.

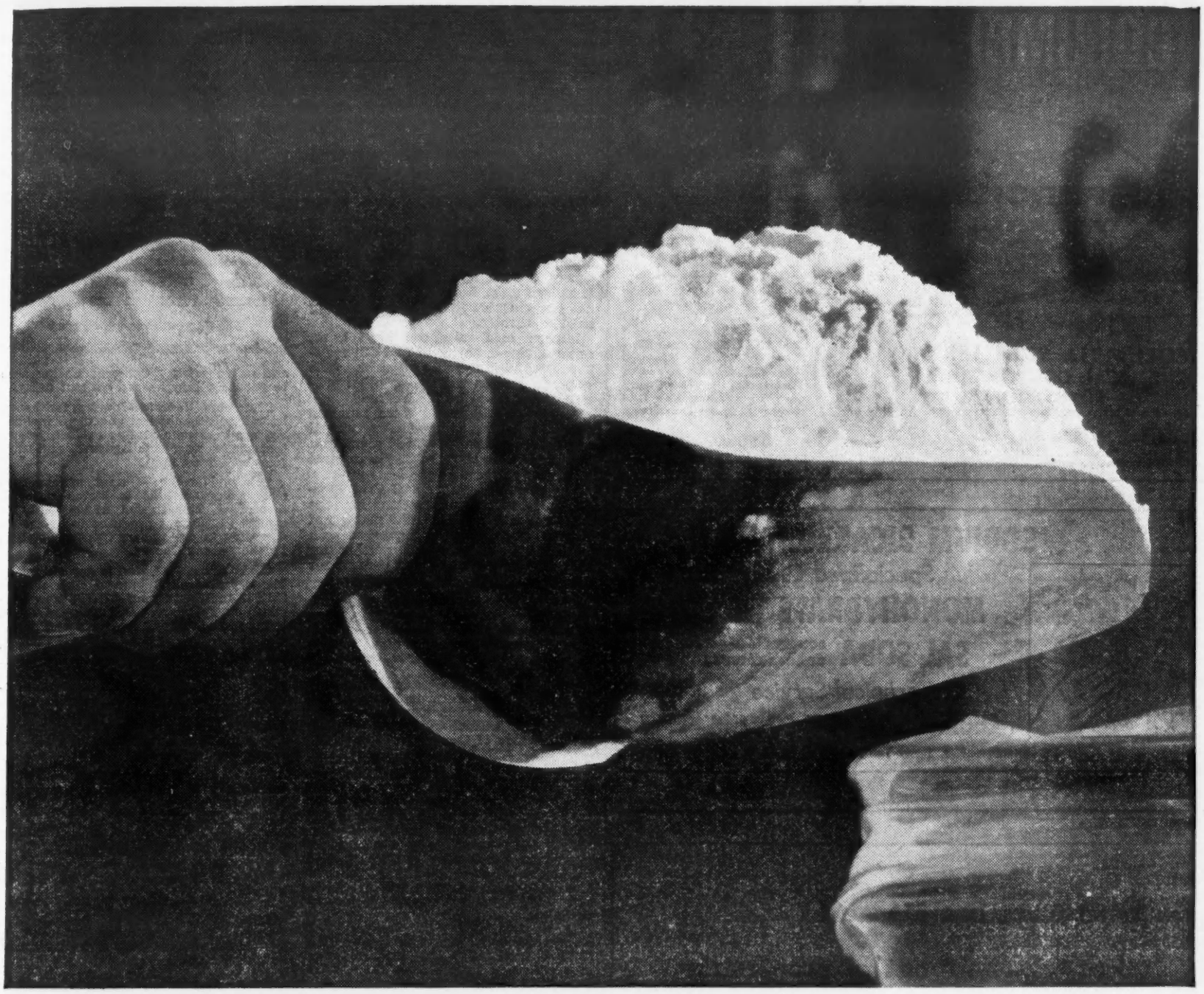
Each of the annual appropriation bills are well on the way to final enactment, and except for the foreign aid appropriation, probably all will be ready for the President's signature before the end of the fiscal year, June 30. This will be a feat that congress has been unable to accomplish for years.

Who Is to Inspect Chickens?

If the unions and some congressmen have their way, the activities of the Food and Drug Administration in protecting the public against harmful drugs, foods, and cosmetics will be subordinated to the task of seeing that the poultry entering the markets is healthy and safe for consumption.

There is a determined effort being made in congress to have the FDA take on the job of poultry inspection on the grounds of public health. What is urged is an inspection system comparable to meat inspection at a cost estimated in the neighborhood of $10 to $12 million annually. FDA's appropriations for all its other activities runs only about $6.7 million.

It can be said for the FDA that it isn't angling for the job. This is something of a switch in government affairs because, as a rule, government agencies leap at the opportunity to grow up into big organizations. But inspection of poultry, say the officials, is much like the inspection of meat, and since the Department of Agriculture has had all the experience in this line, it would be only a simple matter to add poultry to its inspection work.



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If you're using technical benzoic acid, try a 25-lb. drum of these dustless beads and see if they don't make a difference.

You can also get *powdered* benzoic acid from us, in both technical and U.S.P. grades. Either form comes in 25, 50, and 100-lb. fiber drums.

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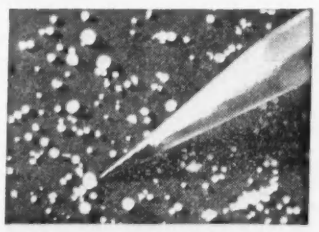

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Heavy Chemicals

The heavy chemicals market saw little in the way of price activity last week, with the exception of a sharp increase in platinum metal, some changes in deposit prices on aqueous hydrofluoric acid drums, announced by one producer, and unsettled undertones in some of the nonferrous metals, notably tin and copper. The mercury market remained dull and featureless, following a period of firming prices a few weeks ago.

In the main, not much complaint was heard about the way business was holding up. Alkali and chlorine producers continued to ship soda ash, caustic, and chlorine in large volume to cover immediate needs of consumers.

A preliminary survey of certain inorganic chemicals by the bureau of census showed March output to have increased from 5 to 8 percent for all but one chemical; that material being calcium carbide.

Mineral acid sales continued brisk, as steel, rayon, chemical and other applications kept the market strong. The only soft spot in the consumption pattern appeared to be fertilizer.

Aluminum chemicals were reported moving to a good demand at unchanged prices. Supplies of the aluminum chemicals were thought ample to meet all current needs.

The American Paper and Pulp Association reported production for the week ended May 18 at 103.0 percent of theoretical capacity, as compared with the revised figure of 101.9 percent for the previous week and 99.6 percent for the corresponding week of last year.

Acid, Hydrochloric—Demand last week was well maintained for neoprene, vinyl chloride, steel pickling and other applications. Supplies were in good balance everywhere but in some sections of the south and southwest.

Production of hydrochloric acid showed an increase of 8 percent in March, to 81,245 tons, from 74,897 tons in February, according to preliminary figures compiled by the Bureau of Census.

Acid, Hydrofluoric—Fluorinated refrigerants and propellants combined to create large volume interest for hydrofluoric acid. Withdrawals also were brisk for use in manufacture of stainless steel, and for glass industry uses.

Acid, Nitric — Nitric acid inquiry remained buoyed up by continuing good steel, nitrated organics, and government demand. Large amounts moved to consumers all through the end use pattern last week.

Nitric acid output in March rose 8 percent, reaching 231,405 tons, from 211,530 tons produced in February, according to preliminary figures from the Census Bureau.

Acid, Phosphoric—Phosphoric acid for the food and feed industries was moving well last week. Industrial demand held up well, and was featured by increased takings from the soft drink industry.

Fertilizer takings have not been as heavy as was expected, and it has appeared to many in the trade over the past few weeks that liquid phosphate fertilizers have not been as popular as was thought.

Some sources objected to the economics of liquid phosphorus fertilizers, particularly when the stress in recent years has been on high analysis materials.

Output of phosphoric acid in March rose 6 percent to reach 331,582 tons, as compared to 313,691 tons in February, according to Census bureau preliminary figures.

Acid, Sulfuric—Sulfuric acid output in March rose 7 percent to 1,441,266 tons, as against an output of 1,350,401 tons in February, according to preliminary figures from the Bureau of Census.

The steel industry, a key consumer of sulfuric acid, showed signs of returning to near 100 percent levels last week, following settlement of labor difficulties and other problems which lowered output to around 95 percent for a short time.

Estimated output of steel last week was placed at 2,355,000 tons by the American Iron and Steel Institute, as against actual production of 2,343,000 tons, or 95.2 percent of capacity the previous week, and 2,338,000 tons, or 96.9 percent of 1955 capacity, for the corresponding week last year.

Alumina, Calcined — There was no change in the overall market picture for this item. Demand continued active for prompt shipment to fill contract needs. Prices of long standing held without change.

Aluminum Fluoride—Trade was characterized by steady demand, good supplies and stable prices. Consumers were able to get what they needed without delay.

Price Trends

Advanced
Platinum, metal, $6 per oz.
Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	May 20, 1955
101.72	101.57	101.49	98.39

For Current Prices see Page 9

Aluminum Hydrate—Inquiry for heavy hydrate went smoothly, and there was not too much of note in this market, except that prices were holding firm, and supplies continued ample.

Calcium Carbide—Output of commercial calcium carbide in March dropped 5 percent, and totaled 87,155 tons, as against 91,550 tons produced in February, according to preliminary figures compiled by the Bureau Census.

Chlorine — Chlorine gas output in March increased 8 percent, and totaled 331,582 tons, as against 313,691 tons produced in February. Consuming demand last week was strong for many end uses.

Copper Sulfate—Industrial and agricultural demand were both active last week. Producers continued to keep an eye on the copper market, which has shown easiness since recently higher sulfate prices.

However, it was noted that consuming interest has held up well all along despite the high prices brought about by the strong copper market.

Ferric Chloride—Quotations continued unchanged. Buying interest was active for sewage treatment. Supplies were in balance with demand.

Soda Ash—The market picture varied, according to reports of individual producers. Most indicated that demand for light and dense ash was holding up strongly.

There were some who reported a slight seasonal decline in sales; a normal situation for this time of year, owing to anticipation of summer shutdowns and seasonal inventory adjustments.

Dense ash continued to move in large volume to flat glass producers, and for use in manufacture of other glass products as well.

Aluminum and phosphates accounted for a strong rate of consumption of light soda ash.

Total crude bicarbonate production in March increased 5 percent, reaching 436,137 tons, as against an output of 416,418 tons in February, according to the Bureau of Census.

Soda, Caustic — Although rayon shipments continued to slump below 1955 levels, producers of caustic soda reported continuing strong demand from the rayon industry.

First quarter production of rayon and acetate yarn, staple and tow set a record high in output of 326,500,000 pounds, a figure equal to output in the fourth quarter of 1955, according to the Textile Economics Bureau.

First quarter 1956 production was slightly above the 326,100,000 pounds produced in the first quarter of 1951, the year in which an all-time high record of 1,294,200,000 pounds was established.

High tenacity rayon yarn output in the first quarter totaled 107,800,000 pounds, a decrease of 4½ percent from levels reached in the third quarter of last year, but 7½ percent above the first quarter of 1955.

Producers' shipments of rayon and acetate yarn and staple plus tow in April totaled 85,800,000 pounds, a decrease of 15½ percent from the 101,800,000 pounds shipped in March and 25½ percent below April, 1955, shipments of 112,100,000 pounds.

Production of electrolytic caustic soda in March jumped 8 percent above February levels. The Bureau of Census shows a preliminary production figure of 329,278 tons produced in March, as against 303,945 tons put out in February.

Lime soda caustic output also increased

8 percent. Production in March increased to 40,235 tons from February's 37,406 tons.

Nonferrous Metals

Copper—Domestic producers kept copper metal priced at 46c. per pound, delivered US destinations. However, owing to continued weakness of the world market, custom smelters priced copper at 45c. per pound, spot.

Mercury—Metal was quiet and unchanged. Spot mercury was quoted at $268 to $270 per 76-pound flask, as to quantity.

Platinum—Metal was up sharply last week, following a long period of strong upward pressure. Platinum was newly quoted at $103 to $105 per ounce, spot.

Silver—The silver market was unchanged. Bullion was quoted at 90¾c. per ounce, cash.

Tin—The tin metal market was given some firmness by uncertainties in Malaya. Metal was listed at 97½c. per pound, spot, on Friday.

Natural Gas

—Continued from page 3

Farmaceutica Italia, Italiana Litopono, and Zanoletti.

Many countries use Montecatini patents and the company also employs some foreign ones. Montecatini continues to emphasize the development of its synthetic nitrogen facilities and now has six plants with a total capacity of 208,000 metric tons of nitrogen. The company's new resin plant near Milan will cost $8 million.

Two new plants for the production of chemical fertilizers from the synthesis of natural gas have been built at Ferrara and Novara. Capacity of these works, which are scheduled to start operations soon, will be approximately 85,000 tons of nitrogen annually—50,000 tons at Ferrara and 35,000 tons at Novarra.

Italy is an important producer of calcium carbide and has an annual capacity of approximately 275,000 tons.

Notable progress has been made by the pharmaceutical industry in recent years. Trade sources report that there are approximately 910 firms manufacturing medicinal preparations, of which 274 are authorized to produce biologicals, and 201 to make medicinal specialties containing narcotics and drugs.

These 475 firms are said to make from 16,000 to 18,000 pharmaceutical items.

The industry's annual output is valued at 110 billion lire and 23,000 workers are employed. Only four companies are large-scale enterprises, about 100 are commercially important, and the remainder are small concerns employing from ten to fifty workers.

About 75 percent of the drug industry's total output comes from northern Italy and the remaining 25 percent from Rome and Naples. Most of the large pharmaceutical firms are in the Milan area and offer a complete line of quality medicinal specialties and synthetic drugs, BDSA points out.

Start of Antibiotics Output

Production of antibiotics began at the end of 1950 at the rate of 800 billion units monthly. Current estimated output of penicillin is approximately 2,000 billion units and that of streptomycin 1,500 kilograms.

Production of terramycin, aureomycin, and other recently discovered antibiotics has not begun and these items are imported, principally from the United States. Because of limited domestic output, at relatively higher prices in some cases, medicinal specialties containing penicillin and streptomycin, other antibiotics, hormones, and glandular products are imported from the United States, United Kingdom, and France.

The Italian industry's exports are much higher than its imports. Most chemicals imported from the United States require a license, often hard to obtain because of the exchange shortage, according to BDSA.

Bids Wanted

Ammonia, 78,000 cu. ft. inv. 245, May 25, Contracting Officer, Patrick AFB, Fla.

Calcium carbide, 300,000 lbs., tech., inv. 512, June 11, Supply Dept., Portsmouth Naval Shipyard, Navy Dept., Portsmouth, N. H.

Ethyl alcohol, 1,458 gals., tech., Bost., Mass., Great Lakes, Ill., inv. FNN-3T-1451-A, May 25, Gen. Services Adm., Region 2, Business Service Center, 250 Hudson St., New York, N. Y.

Ferric sulfate, 50 tons, partially hydrated for treatment of potable water, inv. 7000X, June 15, Supply Dept., Bldg. 83, Phila. Naval Shipyard, Naval Dept., Naval Base, Phila. 12, Pa.

Fertilizer, 120,000 lbs., mixed, 10% nitrogen, 6% phosphoric acid, 4% potash, inv. 82, June 1, Supply Officer, Naval Air Station, Navy Dept., Corpus Christi, Tex.

Insecticide, 1,350 gals. chlordane DDT, 600 gals. pyrethrin DDT, inv. 206, May 23, Contracting Officer, Dover AFB, Del.

Paint, 650 gals. interior, fire retardant paint, Inv. 35, May 23, Contracting Office, Perrin AFB, Tex.; 32,484 qts. and 14,512 gals. heat resisting, glyceryl-phthalate, gloss enamel, Topeka AFB, inv. 1955, May 31, 1,548 gals. interior, semigloss enamel, 8,548 gals. fire retardant paint, East & West Coast, inv. 1925, June 4, 4,360 gals. lusterless, quick drying enmel, 100 gals. brushing, nitro-cellulose, quick drying lacquer, East & West Coast, inv. 1972, June 1, 20,980 gals. camouflage lacquer, East & West Coast, inv. 1937, May 31, 1,980 gals. cellulose nitrate, glossy lacquer, Alameda, Calif., inv. 1989, May 31, 2,292 gas. orange shellac varnish, East & West Coast, inv. 1968, June 6.

1,585 gals. interior gloss, quick drying, enamel, Inv. 1948, June 1, 5,003 gals. ready mixed exterior paint, Sharpe Gen. Depot, inv. 1947, May 31, 7,185 gals. same, East & West Coast, inv. 1940, May 31, 115 gals. alkyd type, zinc-chromate, primer paint, 480 gals. ready mixed, exterior paint, inv. 1927, June 1, 200 gals. alkyd type, zinc-chromate primer paint, 1,745 gals. outside paint, East & West Coast, inv. 1837, May 31, Aviation Supply Office, Navy Dept., 700 Robbins Ave., Phila. 11, Pa.

Sodium phosphate, 18,000 lbs., inv. DA-51010, May 22, Gen. Services Adm., Region 7, Business Service Center, 1114 Commerce, Dallas, Tex.

Trichlororethylene, 121,700 lbs., stabilized degreasing, inv. 9, May 28, Arnold Engineering Development Center, Contracting Office, Tullahoma, Tenn.

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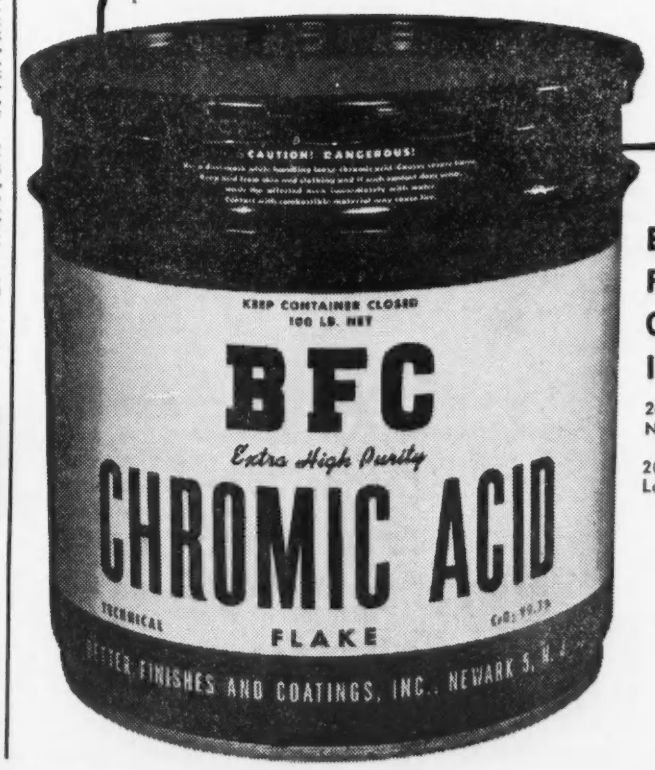

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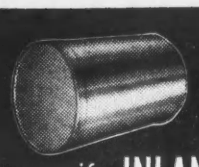

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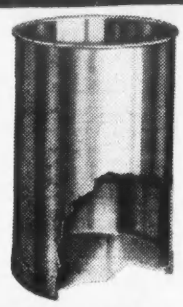

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	Sheet	Cover	Bottom					
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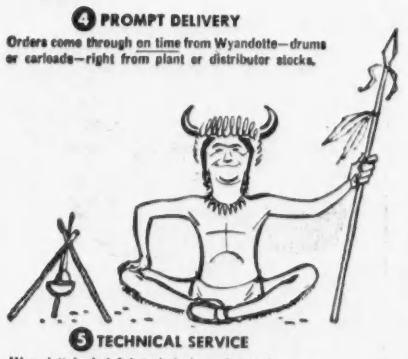

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Export-Import Bank Bill Aimed at 5-Year Extension

A five-year extension of the life of the Export-Import Bank has been recommended to congress by the Administration and provided for in a bill, S3868, introduced in the senate last week by Sen. J. William Fulbright of Arkansas. Under existing law the bank would cease to function after June 30, 1958.

In a letter to the senate banking committee, Samuel C. Waugh, president of the bank, explained that the present limiting date is restricting the ability of the bank to enter into the financing of large industrial or development projects abroad in conjunction with American firms. He said that electric power installation, heavy industry plants, and mining developments are fields in which there has been a substantial increase in the number of applications presented to the bank for consideration.

Bug, Fungus

—Continued from page 5

crops, or methoxychlor, malathion and captan which have a high margin of residue tolerance.

On the other hand, he added, many pesticidal chemicals with a lower margin of tolerance will still be recommended for application to food crops with only minor changes in directions for use made necessary by the new regulations.

The report contained a number of statistical tables on the pesticide situation, including the following on disappearance and requirements, and on United States production:—

	Requirements for domestic consumption in 1955-56[1]	
	Minimum	*Maximum*
	1,000 lb.	1,000 lb.
Benzene hexachloride[2]	7,000	9,000
Calcium arsenate	8,000	12,000
Copper sulfate[3]	40,000	55,000
2,4-D (acid)[4]	25,000	28,000
DDT	50,000	60,000
Lead arsenate	14,000	18,000
Parathion[4]	3,500	5,000
Pyrethrum[5]	7,500	8,500
Rotenone[6]	6,000	7,000
2,4,5-T (acid)[4]	2,500	3,500
Aldrin, chlordane, dieldrin, endrin, heptachlor, and toxaphene (combined)	35,000	50,000

[1]Based on available information; crop year is from October 1 to the following September 30.
[2]Gamma isomer basis; includes lindane.
[3]Disappearance for all domestic uses including industrial; requirements for agriculture only but include plant nutrient as well as fungicide use.
[4]Export data not being reported separately, figures represent total disappearance at producers' level.
[5]Revised imports; includes advanced in value (powdered), also equivalent of pyrethrum extract imported from Africa beginning in 1953-54.
[6]Imports; includes cube and derris, both whole root and powdered.

The following figures denote production of some major pesticidal chemicals by calendar years:—

	1954	1955[1]
	1,000 lb.	1,000 lb.
Benzene hexachloride[2] (gross)	76,934	54,995
Benzene hexachloride[2] (gamma equivalent)	11,500	10,161
Calcium arsenate	3,758	4,232
Copper naphthenate	3,557	*
Copper sulfate	130,616	156,176
2,4-D acid	30,184	34,070
2,4-D acid esters	16,994	26,235
2,4-D acid salts[3]	5,642	
DDT	97,198	125,134
Lead arsenate	15,620	14,776
Methyl bromide	*	*
Parathion	3,889	*
Phenothiazine	3,437	*
Sodium chlorate	75,644	93,226
2,4,5-T acid	2,697	2,887
2,4,5-T derivatives	3,883	*
Tetraethyl pyrophosphate (40 percent basis)	361	507
Ziram	1,117	*
Aldrin, chlordane, dieldrin, endrin, heptachlor, and toxaphene (combined production)	45,169	68,000

[1]Preliminary.
[2]Not including lindane.
[3]Sodium and amine salts.
[4]Either not yet available or cannot be disclosed.

Catalin Head

—Continued from page 4

formaldehyde, and glue units at Seattle are in excellent condition, he said.

At South San Francisco, Mr. Krehbiel conferred with M. W. Reece, RCI vice-president in charge of western operations, and other key personnel. The oldest and largest of the firm's west coast installations, this plant is having great success with a group of new resins for paints, he reported.

Reichhold has a new phthalic anhydride plant under construction near Los Angeles at Azuza, Calif., where one of its polyester resin units already is located, Mr. Krehbiel said. While in the area, he also visited a number of Catalin customers for polystyrene molding powders and found business "brisk and promising."

The Catalin president said he was impressed by the location of the Tuscaloosa, Ala., plant, which can use barges to bring in raw materials for phenol, sulfuric acid, and sodium sulfite.

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Agricultural Chemicals

One major producer of synthetic ammonium sulfate was holding out at the old price of $42 per ton, f.o.b. works. All other large producers of both cokeoven and synthetic sulfate were now listing the $32 price. Immediate results were not significant, but sulfate producers were still hopeful they could recapture much of the trade in mixtures and register a good volume of sales for direct application. Latest available production figures indicated output was still increasing. The domestic fertilizer business was still poor generally, but exports were taking up substantial volume of some agricultural chemicals, ammonium sulfate included.

The increased prices on 14½ percent and 17 percent grades of defluorinated phosphate went into effect last week. A corresponding increase on 18 percent material was expected June 1.

Demand for fishmeal was brisk, and meal and scrap prices rose another $2 per ton. Meal was now selling at $140.

Some producers were now selling both high and low gamma BHC at higher prices initiated in the week previous. Others were listing high and low gamma at identical prices, having increased the price on low gamma BHC while standing pat on the price of high gamma.

Considerably increased demand was anticipated for BHC for cotton and for DDT for cotton and corn, providing there is a normally wet season in the corn and cotton country.

Warnings were sounded against the European corn borer and the boll weevil. Both were thought to be in position to impose heavy damage.

Florida agricultural spokesmen meeting with state and federal agricultural officials unanimously backed a proposed quarantine on the Mediterranean fruit fly.

Price Trends

Advanced

Defluorinated phosphate, feed grade, 14¼% P, $2 per ton.
17% P, $2 per ton.
Fishmeal, $2 per ton.
Fishscrap, $2 per ton.

Reduced

None

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	May 20, 1955
109.73	109.40	110.06	110.79

For Current Prices see Page 9

Animal and Plant Foods

Ammonia, Anhydrous — Sales were off but were regarded as satisfactory in view of the dull market for agricultural chemicals in general. The season in the south, just about concluded, had been fair. There were sales in moderate volume now in the east and mid-west.

Supply was abundant.

Preliminary synthetic production figures issued by the Bureau of Census indicated output of 313,048 short tons in March, up 9 percent from the revised figure of 286,743 short tons reported for the month previous.

Ammonium Nitrate—Bureau of the Census reported preliminary figures indicating production, stated in terms of ammonium nitrate content in original solution, was up 12 percent from the 202,951 short tons (a revised figure) reported for February to 228,057 short tons in March.

Ammonium Sulfate—One major synthetic producer continued to hold out last week listing synthetic at $42 per ton, f.o.b. works. All other major producers of both cokeoven and synthetic sulfate had come down to $32 per ton.

First reactions to the reduction were disappointing. It was still hoped, however, that the adjustment would lead to recapture of considerable business in dry mixtures and substantial sales for direct application.

The hold-out company was of the opinion that synthetic producers should sit tight and cut back synthetic production until the cokeoven producers should have had time to market off the excess of by-product output at the lower price, then move as market conditions warrant.

Substantial quantities of synthetic output were going out in the export market, in which prices were fluctuating and variable. As one large exporter described it, they were "playing by ear" in this trade.

Animal Proteins—Prices of fishmeal and scrap climbed $2 per ton last week in a market characterized by brisk demand. Supplies were fair.

Producers who had been quoting nitrogenous tankage at $4 per unit-ton reduced their price to $3.50. The $3 price that had been in effect in other areas was unchanged.

Dried blood was still quoted at $4.75 in New York but was regarded as shaky. The Chicago price remained at $5.25.

Bonemeal was very weak. The $60 per ton still quoted could be shaded, trade sources thought.

In general, heavy stocks had accumulated. Producers were making deals on price wherever they could find some business.

The discrepancy between the tankage price of $4.25 per unit-ton in New York and that of $5.50 per unit-ton in Chicago was not without reason.

New York tankage trade was sustained largely by fertilizer business, since there was little feed consumption in this area. The fertilizer business has been extremely weak.

Chicago tankage dealers, located in the heart of the feed consumption area, were able to take full advantage of the current boom in grain and feed trade.

The difference in prices in the two cities corresponds closely to the freight rate, $13 per ton, from New York to Chicago. Figuring ammonia content of tankage at 10 percent, the freight rate shows up in the price as $1.30 per unit-ton.

There was a growing market for feathermeal, mostly for animal feed. Due to dispersion of marketing centers and the wide variety in quality — odors, for instance, that ranged from strong to sweet—it was difficult to quote a price. Many sales were transacted at from $4.50 to $5 per unit of ammonia, usually on a delivered basis. Price variations up to $1 per unit were not uncommon.

It has been established that feathermeal contains a growth factor effective in use as a poultry feed. The factor remains even when the feathers are reduced to ash at temperatures high enough to decompose all organic molecules. None of the 15 elements that have been identified in the ash provides the growth factor when separately administered. The Agricultural Research Center in Beltsville, Md., has been trying to identify the factor.

Pesticides

BHC—Minimum prices current for low and high gamma BHC were now identical at $.0075. Some producers of high gamma, not having yet gone along with the advance on high gamma, were still quoting $.0075. Other producers increased the price of high gamma material to $.008.

The export market for BHC remained strong. Provided there is a fair amount of rain in the cotton belt and the normal amount of infestation expected as a result of the rain, producers thought they would be able to sell all the BHC they could make.

It was pointed out that low and high gamma material cannot be used interchangeably in most instances. It costs more to process the high, which requires a more expensive (solid) carrier that must be melted and impregnated with the BHC. Nor would it be feasible in most cases to buy high gamma and cut it down, since there would be delay and expense in getting a new label licensed for the product.

At present, demand and production were both concentrated on low gamma material. The revised structure of prices was counted upon to adjust this balance in such way as to place a little more demand emphasis on the high.

DDT—The price was still listed officially at 24c., but some producers were sold up in advance for from 30 to 45 days. In one case, no orders were being accepted for delivery before late June or early July and then only at 24c.

The most recent government tender was answered with offers of only part of the material sought and that at not less than 24c.

Very heavy additional demand was expected for application to corn and cotton crops.

POTASSIUM CHLORIDE for the CHEMICAL and FERTILIZER INDUSTRIES

CHEMICAL GRADE MURIATE OF POTASH 62.73% K_2O (99.3% K CL) MINIMUM

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GRANULAR MURIATE OF POTASH 60% K_2O MINIMUM

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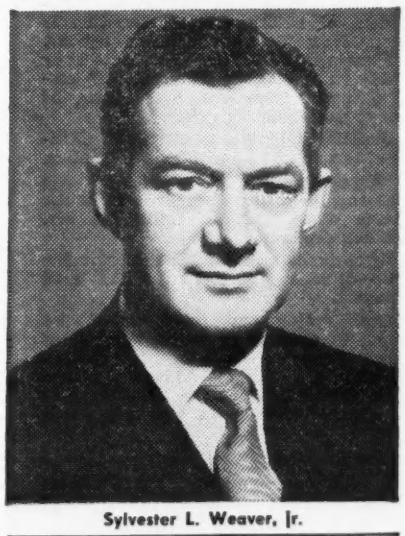
TOILET GOODS ASSOCIATION

21st ANNUAL CONVENTION
New York

MAY 15, 16, 17

NBC Presents Television Show On Closed Circuit for TGA Parley

National Broadcasting Company put on a special closed circuit telecast for the Toilet Goods Association at its May 15th luncheon in the Waldorf-Astoria hotel, New York. The show, a half-hour cross-country tour with such NBC-TV personalities as Arlene Francis, Dave Garroway, Lee Merriweather and John Conte, was led off by NBC chairman Sylvester L. Weaver, jr. Addressing the convention via closed circuit from NBC's Studio 6-B in Radio City, Mr. Weaver introduced Matthew J. Culligan, vice-president and national sales manager of NBC-TV.



Sylvester L. Weaver, jr.

Mr. Culligan spoke before the convention at the Waldorf at a session presided over by Edward J. Breck, TGA director and president of John H. Breck, Inc., Springfield, Mass.

Rehearsal of 'Home' Show

The toilet goods executives were shown a rehearsal of "Home," with star Arlene Francis leading her crew and staff through their paces in New York.

This was followed by a remote pick-up to Dave Garroway and his sidekick Lee Merriweather in Atlanta, Ga., where "Today" originated for two days last week.

The show then moved cross-country to Hollywood where John Conte, host of NBC-TV's "Matinee Theatre," spoke to the toilet goods conclave.

Finally, the telecast returned to New York, where by an unusual means, Mr. Culligan queried himself (via film) on how the medium of television can be effectively used by both large and small budgeted toilet goods advertisers.

The special closed circuit, a presentation of NBC Telesales, was produced by Peter J. Smith.

Reproduced below is a script of NBC's closed circuit telecast. Audio portions of the show appear in light face type. **Video portions of the telecast are in bold face.**

MUSIC: (THEME)

CU—Mobile, Reading:
"21st Annual Convention Toilet Goods Association"

ANNOUNCER: (Music under)

Zoom in slowly

The network television industry extends its greetings to the twenty-first annual

—*Continued on page 48*

Word-of-Mouth Seen Factor in Sales

The first step in building what he called "word-of-mouth salesmanship" is to teach its value and importance to those who work for you, Will A. Foster, vice-president of Borden Cheese Company, New York, told the association. He added that it is important to stress that not only employee loyalty but employee loyalty plus enthusiasm is the key factor.

Mr. Foster pointed out to TGA that uncompensated salesmanship can be derived from stockholders of a larger company by a proper program of stockholder education and perhaps sampling to the stockholders.

Loyalty in Customers

Of even greater importance, the speaker emphasized, is to develop loyalty in present customers for and users of a product. Such customers, he told the toilet goods manufacturers, will recommend you without any thought of compensation.

Turning to the human motives that build uncompensated salesmanship, Mr. Foster listed these six factors:—

- A desire to share.
- A desire to help.
- A desire to impress.
- A desire to justify.
- A desire to belong.
- A desire to boast.

Both public relations and advertising, Mr. Foster declared, can be used to produce "word-of-mouth salesmanship." The qualities in advertising which have the greatest influence, he felt, are credibility, newsiness, humanness, sincerity, helpfulness and conviction.

Following is an abstract of Mr. Foster's remarks:—

Showing beneath the skirts of accomplishment by many fine sales organiza-

—*Continued on page 55*

Toilet Goods Industry Must Improve Distribution Technics, TGA's Retiring Head Says

With sales of cosmetics and toilet goods breaking all records—over $1,192,000,000 last year—the industry must find ways to cope with the increasing load on its distribution machinery brought on by stepped-up production and demand. This is what the retiring president of the Toilet Goods Association, John A. Ewald of Avon Products, Inc., New York, told TGA's twenty-first annual convention last week in New York.

John A. Ewald

Mr. Ewald, who was succeeded as TGA president by Pierre Harang, vice-president and director of Houbigant Sales Corporation, New York, pointed out that 1955 sales by the industry "indicates a dollar expenditure for cosmetics and toilet goods per household of about $25 annually, almost two and a half times the expenditure per family in 1934."

Problems Arising From Growth

This phenomenal growth of the toilet goods industry, Mr. Ewald contended, has brought with it problems of consumer markets and distribution technics, for which more and more basic research is needed.

"We are concerned," he said, "with a new and everchanging market—not with a static economic climate. Population is not only increasing but is constantly shifting. Good roads and increasing numbers of vehicles have caused a continuing mass migration to outlying areas.

"Consumer incomes, attitudes and needs are changing rapidly," Mr. Ewald continued. "The broadening of market research makes it abundantly clear that we are conscious of the fluidity of our market and have the foresight to keep ourselves as well informed as it is possible to do with the technics available.

"The influences of changing times and pyramiding problems sometimes cloud our thinking when we look into the future to try to judge what is ahead for us. When we stop to consider our problems today, however, they are not very different than they were twenty-one years ago —except in degree.

Situation Twenty-One Years Ago

"Twenty-one years ago," the speaker pointed out, "we were challenged because new markets were opening up at a rapid pace. New markets are still developing with amazing speed but we find that our thinking has to be broadened to consider the world in addition to local and national markets. As long as pressures for expansion of business are in evidence the opportunities for greater success in the cosmetics and toilet goods business will be present.

"We must be constantly alert," Mr. Ewald went on, "to new developments, assessing them in terms of our own business, visualizing how they will affect us and how we may utilize them in our future plans.

"We have come a long way in the past few years and have achieved through research, sound business practice, and high

—*Continued on next page*

Manager's Role In Business Is Told

What modern business needs today is management teamwork, John M. Fox, president of the Minute-Maid Corporation, New York, declared at TGA's annual convention last week. He added that the days of the individual or "prima donna" manager are receding into the background.

Mr. Fox felt that six key qualities should be present in a man destined to command in business. The first quality, he said, is creative ability, but, he noted, creative ability should be accompanied by judgment and sound thinking.

Developing Creative Ability

This quality, the Minute-Maid president went on, can be developed by the individual, who should take every opportunity that crops up to build and execute his judgment.

Administrative skill, the speaker indicated, is a third quality. In this connection, he pointed out that the company executive must be able to foresee the needs of his operation and to foresee his organization's requirements in men, materials, money and time.

A fourth important quality in a manager, Mr. Fox stated, is a positive attitude. A further important weapon against worry

—*Continued on page 44*

Pierre Harang

Stephen L. Mayham

Kay Fitzpatrick

ASSOCIATION'S TOP OFFICERS: Pierre Harang, vice-president and director of Houbigant Sales Corporation, New York, elected president of the Toilet Goods Association, succeeding John A. Ewald of Avon Products, Inc., New York, Stephen L. Mayham, renamed executive vice-president of TGA, and Kay Fitzpatrick, elevated from assistant secretary to executive secretary of the association.

Toilet Goods Industry Urged to Improve

—*Continued from page 41*

ethical standards, a goodly measure of financial soundness.

"The forward impetus which we have developed in the past few years will be constantly strengthened if we continue to look forward, taking full advantage of all the tools which are available to us and utilizing those new technics which will surely develop as we go forward.

"As we look over the horizon," the outgoing TGA president concluded, "the potential of the toilet goods industry is extremely promising.

"With the increased emphasis on good grooming—the speed of fashion changes influencing hair styles—complexion coloring and hand and nail care—and seasonal cosmetics—and with our enlarged domestic and foreign markets—and the acceptance of cosmetics and fragrances from teen-ager to grandmother—and the desire of every man and woman to be more fastidious—all of these factors add up to a tremendous future opportunity for growth for each and every member of the toilet goods industry."

Mr. Ewald's successor as TGA president, Mr. Harang, has been a vice-president of the association for several years and has been connected with Houbigant for thirty-two years.

New TGA Vice-President Elected

Elected vice-president of TGA to fill the vacancy created by Mr. Harang's elevation to the presidency was J. I. Poses, president of D'Orsay Sales Corporation, New York. Mr. Poses has long served on TGA's board of directors and is a former secretary of the association.

Jean Despes of Coty, Inc., New York, A. E. Johnston of Colgate-Palmolive Company, New York, and Charles T. Lipscomb, jr., of the J. B. Williams Company, Glastonbury, Conn., were re-elected vice-presidents of TGA.

Philip C. Smith of Yardley of London, Inc., New York, was re-elected treasurer and William F. Denney, jr., of Frances Denney, New York, was re-elected secretary of the association.

Three Three-Year Directors Elected

New directors of the association elected to serve three-year terms are: John W. Cawley, president of the George W. Luft Company, Long Island City, N. Y.; Carl W. Gardiner, vice-president of Elizabeth Arden Sales Corporation, New York, and D. H. Williams, assistant to the president, Sterling Drug, Inc., New York.

Directors whose term expired in 1956 but who were re-elected to new three-year terms are: Robert E. Schwartz, vice-president of Wildroot Company, Buffalo, N. Y.; Benson Storfer, president of Parfums Corday, Inc., New York, and L. B. Whitehouse, sr., vice-president of Morton Manufacturing Corporation, Lynchburg, Va.

Directors representing TGA associate members elected for one-year terms are: Gert Keller, president of Schimmel & Co., New York, and Dr. Lloyd Hazleton, president of Hazleton Laboratories, Falls Church, Va.

CONDUCTS PANEL: Willard Pluethner, vice-president of Batten, Barton, Durstine & Osborn, New York advertising agency, who conducted a "Brainstorming" panel at TGA's advertising session on May 15.

'Brainstorming,' New Idea Developing Method, Shown

"Brainstorming," a new technic for developing ideas, was described and demonstrated by Willard A. Pluethner, vice-president of Batten, Barton, Durstine & Osborn, New York advertising agency. Mr. Pleuthner told TGA that these four BBD&O rules make a "Brainstorm" session different from any other form of group or individual thinking:

- Judicial judgment is ruled out. Criticism of ideas must be withheld until later.
- "Free-wheeling" is welcomed. The wilder the idea, the better. It is better to tame down than to think up, Mr. Pluethner declared.
- Quantity is wanted. The greater the number of ideas, the more the likelihood of winners.
- Combination and improvement are sought. In addition to contributing ideas of their own, the speaker said, participants should suggest how ideas of others can be turned into better ideas, or how two or more ideas can be joined into still another idea.

Companies Using 'Brainstorming'

Mr. Pluethner reported that "Brainstorming" is used in the following companies:

Bristol-Myers Company, New York; Rexall Drug Company, Los Angeles; Johnson & Johnson, New Brunswick, N. J.; E. I. duPont de Nemours & Co., Wilmington, Del.; Campbell Soup Company, Camden, N. J.; International Salt Company, New York, and General Electric Company, Schenectady, N. Y.

Records show that in a "Brainstorm" session the participants develop at least three times as many ideas as they would have thought up if they worked on the same problem in their own offices, Mr. Pluethner asserted.

He said this is because of the association of ideas at the session. One idea sparks others from other participants, he explained.

Following the slide talk on "Brainstorming," Mr. Pluethner moderated a panel of TGA members. The panel developed ideas for selling more toiletries and cosmetics to the teen-age market.

CIBS Award Presented To Harvard's Dr. Blank

The annual award given by the Cosmetic Industry Buyers and Suppliers Association was presented May 17 to Dr. Irvin H. Blank. Dr. Blank was presented with a scroll as well as a cash prize of $250 by CIBS president David J. Warner of Fleuroma, Inc., New York. The award is given anuually for the best paper presented before TGA's scientific section during the preceding year.

The award-winning paper was entitled "Mechanism of Agents Used for the Relief of Dry Skin," and was presented before the May 12, 1955, meeting of the section. Dr. Blank is associated with the dermatology department of Harvard Medical School at the Massachusetts General Hospital.

To compose a classic,

you need more than common scents

The soap you make is classic, when it's unforgettable. You must depend on the nose to compose your wanted, wonderful odors. Their creation and blending take art and skill, and a nose that knows perfection.

Use the good scents Norda makes, because common scents will not sell your soap. Use the nose of Norda, to compose all their characteristics into that subtly right fragrance.

Shouldn't you be profiting from what Norda makes and Norda knows? See how much you will, by a request, on your letterhead, for free samples from Norda.

Norda does what Nature does . . . Norda makes good scents

Norda.

601 West 26th Street, New York 1, N. Y.

CHICAGO • LOS ANGELES • SAN FRANCISCO • TORONTO • MONTREAL • HAVANA • LONDON • PARIS • GRASSE • MEXICO CITY

Skillful Hands

From skillful hands come the masterpieces in fragrance, too. The perfume chemists of van Ameringen-Haebler, Inc. are unmatched in ability and experience, both artistically and technically, and their skill is ready to serve your fragrance needs.

van Ameringen • Haebler, Inc.

521 WEST 57th STREET • NEW YORK 19, NEW YORK

Manager's Role in Business Is Told

—*Continued from page 41*

and pessimism, he continued, is faith—in the people who have been assigned key jobs, faith in oneself and faith in God.

A fifth quality to be sought in a manager, he continued, is courage. A manager, Mr. Fox declared, must be a man who will gamble, not in the Monte Carlo sense of the word, but in the sense of taking a risk. Perhaps, he added, he might have to make up his mind before all necessary facts and data to make a risk-free decision are at hand.

Character Needed in Managers

The sixth and final quality needed in a manager, Mr. Fox concluded, is character. He stated that a manager must be a man of high integrity and humility. Quoting from President Eisenhower, he said, "We should always take our job seriously, but never ourselves."

Following are excerpts from "What It Takes to Be a Manager," the address delivered before TGA by Mr. Fox:

In selecting this subject I realize I am venturing into dangerous territory. There is very little agreement on the matter—the business school professors rarely speak from experience—merely from observation—and a lofty observation at that since they haven't been troubled with the little problem of "meeting the payroll."

The managers themselves are so busy that they rarely have time to analyze just what it is that makes them good managers. What is more, they are by nature realists and their failures and mistakes fog over the elements of successful management that they practice—much of it by instinct rather than planning.

To be at all objective about this controversial subject, one must review the three broad phases of management evolution that have developed during our own lifetime. Fifty to seventy-five years ago nearly every company in America was managed by its owner. Some of the most exciting chapters of our industrial history were written by these brilliant, farsighted and tough-minded men like Henry Ford, Firestone, George Westinghouse and their ilk.

With the growing need for capital to expand, the ownership shifted to the public. Guidance of the companies remained for the most part in the hands, strong hands they were too, of such giants as T. J. Watson of I.B.M., Sewell Avery of Montgomery Ward, Walter Chrysler, and hundreds of others, many of whom are still running a good show in their respective companies. But a one-man show.

Growing Complexity of Business

As our businesses have become more complex with the need for special knowledge in production, taxes, marketing, engineering and finance, the scope of running a company widened to a vista beyond the ken of any one man. The team management idea was born. It is perhaps best exemplified by General Motors—one of the earliest and probably still the most successful proponent of this scheme.

The team concept has some very real hazards, however. The very need for specialization has had the tendency to produce men who have a kinship to finance or sales or production. This often develops an over-emphasis of their specialty to the detriment of the whole operation.

This was exemplified in the recent book and movie, *Executive Suite*. Here we saw the company controller, who had gone "overboard" on the importance of

John M. Fox

the financial scoreboard side of the business.

As the war ended, our managements awoke to the great need and the great lack of qualified top management men. Executive development plans became a fad—nearly every major company had one. "Job rotation" became the watchword. Advanced management courses at the universities were in great demand and still are.

I am not in any way belittling these efforts—some have proven very effective. Others have failed miserably. You all probably know examples of each. There is emerging, however, a feeling that finding our leaders of tomorrow is more fundamental than merely appointing a group of "crown princes" who may or may not have what it takes to be good managers.

Columbia Conference Cited

It was my good fortune to attend a roundtable conference at Columbia recently. The subject of the discussion that took place one evening a week for two months was "Management of Expanding Enterprises." The topic that came in for a heavy concentration of study was this one of selecting and training the men who could successfully manage a growing enterprise.

From the statements and convictions of this group of successful operating executives, plus some additional observations of other business leaders who have demonstrated their ability to field competent management teams, I have extracted six fundamental qualities that are found or should be present in men destined to command in business.

This list I'm sure is not complete. I must hasten to point out that all of these qualities are rarely, if ever, found to their fullest in any one man. Such a paragon of perfection probably does not exist. The list may be useful, however, to anyone who wants to climb high on the management ladder and who is willing to pay the price that the climb exacts.

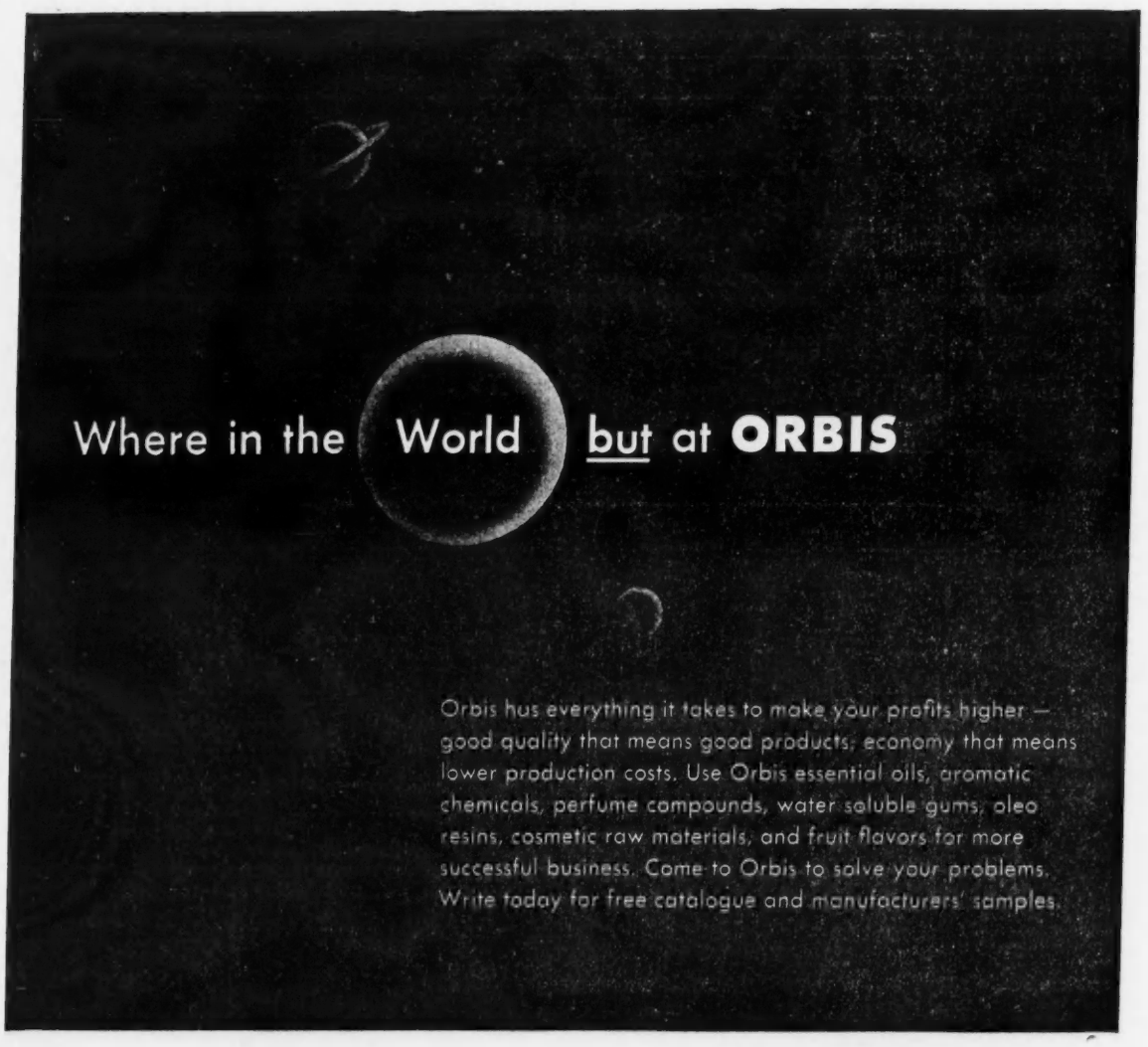
The first qualification is CREATIVE ABILITY. Business is looking for men who can think. There are many synonyms for this quality. It is sometimes called vision—also imagination. Whatever the handle, remember that nothing starts without an idea behind it. It is the lifeblood of an organization. It is a must for success. It is an essential of all growth.

Ability to Think Creatively

To be a good manager, the ability to think creatively, constructively and clearly is essential. The leadership role in management calls constantly for resourcefulness. The fast moving, continually changing pattern of the modern competitive business world demands this quality if success and satisfactory profits are to be the goal.

There are many misconceptions about this ability to have ideas. One of the most outrageous statements on the subject that I have ever heard came from a professorial friend of mine who said that a man should change jobs and preferably businesses after he had produced ten good ideas.

Quite to the contrary, it is well recognized now that the brain not only never tires, it actually becomes more produc-



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ELAR
FLEUR DE NUIT
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JASMIN
JICKEY
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NARCISSE
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FOUGERE BOUQUET No. 378
LILAC AMBER BOUQUET No. 275
LILAC BOUQUET No. 150
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TGA Convention Report

tive and efficient with use. Moreover, no one has yet been able to utilize more than a small fraction of the potential in his brain.

The ability to think creatively can be developed. One of the greatest aids to this worthwhile pursuit is the faculty of turning loose the tremendous thinking power that is latent in every one of us. This is the use of our subsconcious minds.

Those of you who have learned to tap this great human resource know its tremendous value. For those of you who have yet to experience the wonder of having the solution to a knotty problem reveal itself to you as you are shaving in the morning or at some other unheralded and unplanned moment, one of life's greatest thrills still lies ahead.

* * *

Just a few other thoughts on creative ability. Be curious—ask questions—keep an open mind to the other fellow's ideas —and listen—by all means learn to listen!

Remember above all that your superior is expecting you to bring him solutions —not problems.

The second characteristic to be looked for is JUDGMENT. Webster defines this somewhat elustive quality as the "ability to judge justly or or wisely, especialy in matters affecting action." It is also described as "good sense." Men who are destined for leadership must be men who can make sound and wise decisions.

This sound-thinking qualification goes hand in hand with the previous creative thinking attribute. Sheer brilliance of innovation and invention can be disastrous without a counterbalance of common sense.

Use of Common Sense Urged

I had a superior early in my sales career who was quite famous throughout the company as a trainer of men. He had an impressive record of raw college graduates who had started under his tutelage and had become high producers and often good managers in a remarkably short time. A pet aversion of his was people who would not use their heads.

Instead of solving our problems for us when we would come running into his office with some headache that had us licked, he would tell us to turn around and read out loud the sign tacked above his door. This sign read "AS A LAST RESORT USE COMMON SENSE."

* * *

Is judgment something people are born with? I think not. I go along with an old college professor of mine who once lectured my class on how to develop judgment. It was his advice that we should take every opportunity that presented itself to practice and exercise our judgment.

He recommended that we study public issues currently under discussion in Washington. Read all we could about them. Read the commentators' and columnists' opinions, but reserve our decision until we had gotten both or all sides of the argument.

Weigh Evidence Carefully

Then carefully weighing the evidence, the facts and the opinions that we had uncovered, we should make up our minds on the issue. We should write down our considered position on the matter. Later, when time had finally brought the right answer to light, as it nearly always does, we should compare our position with what turned out to be right.

"This practice, if started early enough in life, and continued for as long as you live, will develop our wisdom without paying the price of expensive mistakes," my professor said. I didn't follow his advice for very long, but I wish I had.

A final thought on this matter of sagacity. A negative, fault-finding approach is not a substitute for judgment. Every new idea can be killed at its birth by a superior who can see nothing but the reasons why something won't work.

Enthusiasm and a positive attitude are an important part of the balance required of a leader whose judgment and decision making activities will be tested from the day he assumes important managerial responsibility.

The third qualification that seems to be generally considered essential in a manager is ADMINISTRATIVE SKILL. The good executive must be able to foresee the needs of his operation—to forecast its requirements in men, in materials, in money and in time. He must have the talent to resolve these needs into a practical and understandable program. Modern day business must have men who can plan.

Unglamorous Side of Manager's Job

This is the unglamorous side to the manager's job. It requires a painstaking concern over a multitude of details; it requires more than a little "i" dotting and "t" crossing; it requires concentration and vigilance—and, above all, it requires an orderliness of mind and method. In my opinion it is an area where many otherwise top executives are the weakest.

In the pressure and pace of daily operating affairs, it becomes a problem for many to find time for the planning and thinking out of the projects that have been created and decided upon by our fertile minded and decisive executive types. This failure can be, and often is, the graveyard of many worthwhile ideas with great subsequent waste of dollars and hours.

Our forefathers may have been able to operate on the "opportunistic" basis. The growth of our economy, the unlimited natural resources, the vast untapped markets permitted and actually, in many cases, called for the fast-moving, crap-shooting business swashbuckler.

Times have changed. The difficulty of creating capital wealth because of the tax structure and the competitive complexion of our current economy does not permit much leeway for such waste of either money or time.

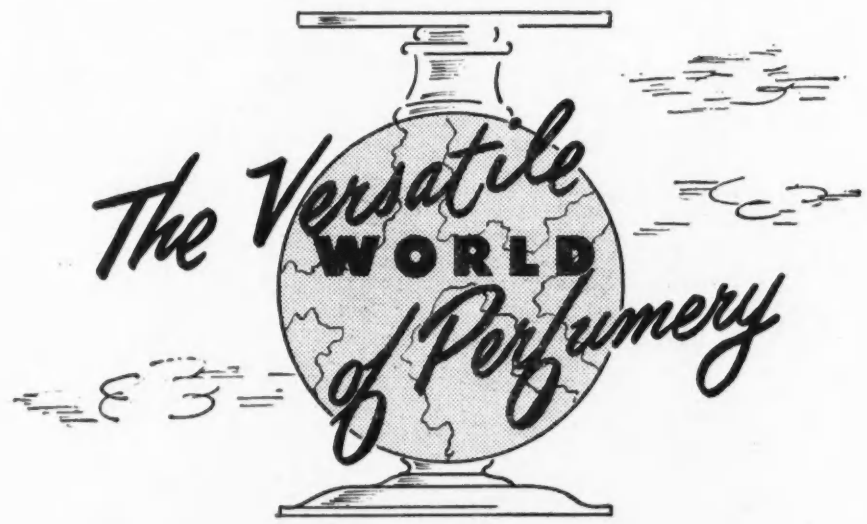
As I said, one of the outward manifestations of this quality is orderliness. The way a man marshals his thoughts, the way he presents his arguments, the way he plans his own life, the way he keeps his working quarters—these are the signs of an orderly mind—or lack of it.

Managers and Their Finances

Omitting the infrequent, unforeseeable emergency that can throw a curve into any of our personal lives, the good manager lives within his income, and finds ways in spite of todays' inflated living costs to protect the financial security of himself and his family, to provide for their health and well-being and to spare himself the mental anguish of not being able to make ends meet. This calls for a real measure of sacrifice in most cases, and a family decision to deny itself many of the material enticements with which our society abounds.

The fourth quality that the Columbia seminar felt was important was a POSITIVE ATTITUDE. A manager must be optimistic—he must radiate confidence

SPEAKS ABOUT DISPLAYS: Joe Leigh, chairman of Einson-Freeman Company, Long Island City, N. Y., who discussed what the toilet goods industry can learn about displays from other fields at TGA's management session on May 15.



Only a few decades ago, the sole application of perfumery was to enhance the appeal of a large variety of personal products.

While perfumes and cosmetics are still of primary importance, the field of fragrance has recently entered into a vast new era . . . the era of industrial odorants. From household products to manufacturing processes, lube oils to smokestack deodorizing the field now extends. Today's perfume chemist moves in an ever widening area, filling new demands for his specialized services and in so doing creating a versatile and expansive new industry. For more than 157 years, D&O has served the perfume industry both traditional and developing. This experience becomes the invaluable property of all D&O customers.

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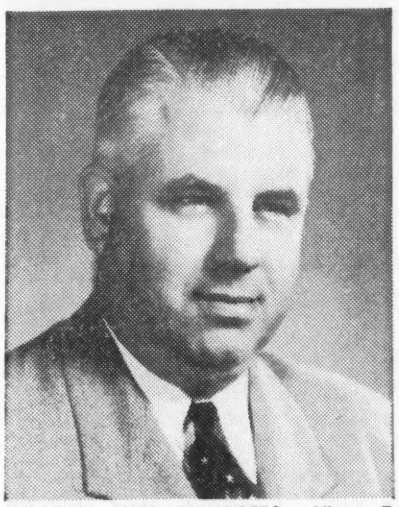

PRESIDES OVER MANAGERS: Albert E. Ritchie, vice-president of Wildroot Company, Buffalo, N. Y., who presided at TGA's management session on May 15.

and enthusiasm. The business world of today and tomorrow wants leaders who can inspire.

This positive approach cannot be a manufactured or an artificial one. It must not be merely a pose—it must be sincere and deeply felt. A company, an operation within a company, a project within an operation, must be led by a manager who has an all-abiding faith in his work and objectives. This overriding belief is usually the secret weapon against the discouragement of difficulties and problems.

The behavior of the manager, his facial expressions, even the droop of his shoulders are all watched closely by the rank and file of employees. A discouraged and despondent executive can send a hundred or more employees' morale into the gutter. A worried looking boss can touch off a wave of fear rolling throughout an organization that starts a chain of resignations among the best people and work slowdown among nearly all of them.

How to Develop Positive Attitude

You can properly ask how does a man go about developing this positive, optimistic attitude. With the problems of government regulations, taxation, cutthroat competition, strikes, personnel failures besetting him daily, most modern managers face enough grief to cause them to commit suicide once a week. How do some men develop the ability to relax in the midst of constant pressure and trouble?

An important key to the answer to this question is health. Vigorously good health is a must if a manager is going to keep up with the pace demanded by managerial responsibility. This means proper eating habits, care against over-indulgence in smoking, drinking and eating, adequate rest and exercise. A sick or half-sick manager is a real handicap to a company.

All work and no play usually produces a tense and grim executive. Hobbies and outside interests actually result in a man having greater capacity and vigor in his professional role. Vacations are necessary—and no company should permit its key executives to get so swamped that they feel guilty for taking time off.

It is not easy to develop this ability to stay undisturbed when things around you are going wrong. The jokes about the ulcer incidence among business managers is no joke. Our country's consumption of aspirin is a national disgrace.

Another important weapon against worry and pessimism is FAITH—faith in the people to whom you have assigned an important job, faith in yourself, faith in God. People more often than not live up to the faith that they know you have in them. You yourself will more often than not do a good job if you believe you can.

* * *

The job of inspiring others also involves some important mechanical skills. You want men who can talk well, men who can write well, men who can be understood, men who can sell people on doing what they want them to do.

Some people have these skills quite naturally—most have to develop them painfully and laboriously. How? By practice, practice and more practice. This is why public speaking courses are desirable for an aspiring manager. He should also strive to excel in clear, concise written expression. A large measure of his success will depend on his ability to communicate.

The fifth quality to be sought is COURAGE. Managers must be men who will gamble—not gamble in the Monte Carlo, Churchill Downs or crapshooting sense of the word. Business is a matter of taking a risk and quite often the magnitude of the risk is a measure of the possible gain —or loss.

Decisions Before All Facts Are In

In nearly every business decision someone must have the courage to take positive action without having in hand all of the facts and data necessary to make that decision risk-free. To wait for all of the necessary information can mean missing an opportunity, can mean a more aggressive competitor will take the important initiative, can mean a timing failure. Timing in business affairs is vital. So usually someone, a manager with courage, must stick his neck out and decide to do something—now!

It takes courage to delegate. To give a subordinate the authority to perform a function, to stand aside and let him make a decision—a decision that may turn out to be wrong—takes valor. It is a fundamental precept of business management that although the work load may be distributed down the line and many decisions may and should be made down the line, the final responsibility for the success of an operation cannot be delegated.

The results of a departmental decision cannot be ducked by the department head, the performance of a division is the responsibility of a division vice-president, the deeds and performance, or lack of it, of every individual in a company is the responsibility of the president. A manager can never abdicate this responsibility.

Since it is a well understood code that a manager must take the blame for the mistakes of his organization—yet at the same time pass on the credit for its success—it defies a man's natural instincts not to review and approve every decision within his jurisdiction. When this happens you have no true delegation. One of the hardest lessons for a manager to learn is to learn to "let go."

* * *

When a manager is given responsibility it is not for him to complain or alibi. Nor can he wait for a decree from above when immediate action is called for.

If the action which his best judgment tells him should be taken is one that is expressly forbidden by policy or instruction from higher management, then the executive should try to get clearance for a change of the policy. When there is not enough time for the clearance to come through, he has to take action and explain or defend it afterward.

* * *

The sixth and final quality that I am going to talk about is CHARACTER. Managers must be men of high integrity. The quality of integrity—the honesty, sincerity, the moral posture of a top executive must be unquestionable. This is a common ingredient of all real leaders. They may have the previously discussed five characteristics in greater or lesser degree—on this quality there can be no compromise.

Leaders of integrity have humility. President Eisenhower, probably the greatest leader of men in our time, demonstrated this quality the night that he was elected President of the United States.

Those of you will remember his words as he stood before his deliriously happy campaign workers, having achieved the top accolade of American life—"We should always take our jobs seriously but never ourselves."

There's something different about

Dreyer

They call us old hands at this business. A good many years of "depending on Dreyer" have built our background of helping you.

We have never grown old, however. Here at Dreyer, we *think* young.

Today there's new drive at Dreyer. We are a vigorous, modern organization with young, look-forward ideas. Up-to-date thinking here . . . thinking ahead . . . is pulling double harness with experience. The team's working hard and well.

So depend on Dreyer more than ever.
We can help you and save you money.

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REYER

TGA Convention Report

NBC Presents Closed Circuit TV Show

—*Continued from page 41*

convention of the Toilet Goods Association.

(MUSIC UP BRIEFLY AND UNDER)

Diss to front of camera and dolly slowly into lens turret

We invite you now to come with us through the land that is television. Today, we propose to tell you why TV sells and how it can begin working for you. (PAUSE)

Ladies and gentlemen, the chairman of the board of the National Broadcasting Company, Sylvester L. Weaver.

Pull back from lens turret to reveal Weaver next to camera

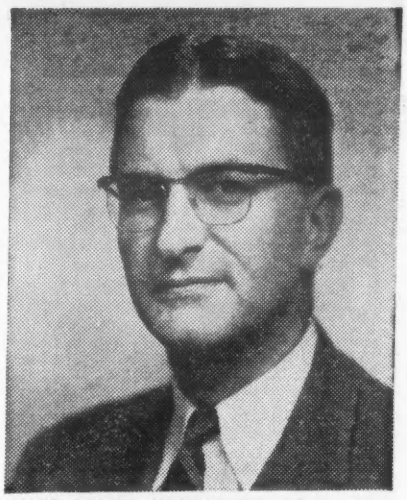
MR. WEAVER:

Good afternoon. It's a real pleasure for me to be here among 18 percent of our industry's billings.

I am here "live" as the terminology has it, but actually via closed circuit television from Studio 6B in the RCA Building. This is necessary because we are going to switch around town a bit. And the electronic technics of this closed circuit may interest you quite apart from—but I hope not more than—what we are going to say. You may want to study the technic itself, for this closed circuit kind of television meeting is something you and your associates can use to appear before your distributors and dealers in many cities at once on important sales occasions. The electronic age has put the tux that travels back in the moth bag. But now to our meeting with you . . . and to the major point I want to make.

This is, that although the television commercial makes the sale, it is television itself that draws the millions.

And no medium has the personal hold on the millions that television has today. Don't take it from me but from the rating services. When Groucho and Gobel attract their tens and tens of millions, we say comedy always was great on the air. But when *Peter Pan* attracts 67 millions and *Richard III* 43 millions, and the *Twisted Cross* 30 millions, and when something so specialized and artistic as the Sadler's Wells Ballet attracts 23 millions, we say, . . . well, we say it is television itself that is great. And we, as business men, may want to take a second look—even though we are already using television—just to make sure we are not underrating it in our plans. And to make sure we are not making the mistake of programming down to get at a popular audience, that is, instead, reaching up for the fine performances of a Katherine Cornell in *The Barretts of Wimpole Street* and Siobhan McKenna and Judith Anderson in Maurice Evans' production of *The Cradle Song*. The most encouraging things to me in our entire social outlook is the way in which the American people are taking to programming that has been up-graded. And you and we as advertising men can take both pride and profit in following that trend. Television is a vital force on the American scene. To millions it has become a companion that enlightens, illuminates, informs—that inspires and enlarges the horizons of the world they live in.



TALKS ABOUT WOMEN: Howard A. Stone, president of Daniel Starch & Staff of Mamaroneck, N. Y., who discussed the meaning of toilet goods ads to women at TGA's advertising session on May 15.

Association with TV and its lustre is not limited to the multi-million dollar budgeted advertiser. Through TV's "magazine concept" advertisers with modest budgets—or seasonal advertising limitations — have been able to enter network TV for a few insertions or even just one. An advertiser can buy power exactly when he needs it. He can buy as little or as much as he wants. This means majority representation. It means that all of you can afford to participate, as advertisers, in network TV programs.

Our broad advertising strategy might also have a second look. At NBC, we are looking at the new economy that lies ahead—a 60 percent rise in population during the next twenty years. Sixty percent! Which of you are going to get your share of all that additional business, and how?

Now, as this program moves out to you at the grand ballroom, take a look, via television, at what television can do for you during the first year of the twenty. Nothing else we know of now will rival it during any of the twenty. It is my pleasure to switch you to NBC's vice-president and director of network television sales, Matthew (Joe) Culligan, who is with you there and indeed "live."
Joe—

Fade 6B to Black
(But Continue 6B Feed)

MR. CULLIGAN:

Spot on Mr. Culligan at Lectern in Ballroom

Thank you, Pat. Good afternoon, ladies and gentlemen. I would like to take the liberty of talking to you—if I may—as though you had just hired me as your advertising manager. And, with your permission, I particularly would like to be the advertising manager for companies that are not using network TV.

I would ask the president and the sales manager of your company to take a second, serious look at television.

The sales manager might begin by saying this:

MS—Sales Manager at Desk (From 6B)

SALES MANAGER (From 6B):

"TV is great, Mr. Culligan, but it costs too much—we just can't afford it."

MR. CULLIGAN:

I'd rather ask you—can we afford to let competitors beat us to the punch? We have already seen the tremendous sales impetus network TV has given to leading firms in our field.

Flips:

$50,000—6 TV Ads.

Using only $50,000 of our budget, network TV can provide us with sponsorship of six programs . . . and the commercials will be seen in over ten million homes.

$100,000—12 TV Ads.

For $100,000, we can have twelve, one-a-month for a year, or one-a-week for twelve weeks. For $500,000 we can have one-a-week throughout the year.

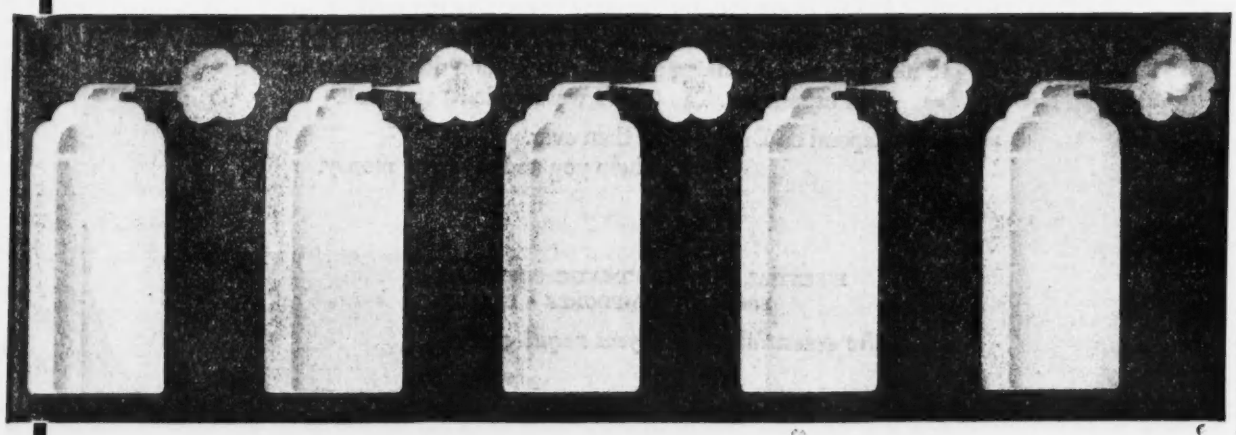
Fade 6B to Black (Spot on Mr. Culligan at Lectern in Ballroom)

Incidentally, summertime is bonus time on TV. This busy season for many of you—is just when you can get more network commercial time for your money.

Now, I understand that we are expected

★ FELTON *for* AEROSOL PERFUMES

to bring exciting new merchandising possibilities and sales success to your aerosol packaged products!



AROMATICS • ESSENTIAL OILS • PERFUME BASES
FELTON
CHEMICAL COMPANY, INC.
599 Johnson Avenue, Brooklyn 37, N. Y.

FELTON'S imaginative perfume chemists and aerosol technicians have the "know-how" and the facilities to suggest, adapt or custom-create the fragrance to give sales appeal and meet the exciting requirements of YOUR aerosol products.

Let our aerossl "know-how" and facilities serve you . . . *consult us freely.*

PLANTS: BROOKLYN, N. Y. • LOS ANGELES, CAL. • MONTREAL, QUE. • VERSAILLES (S&O) FRANCE
SALES OFFICES: ATLANTA • BOSTON • CHICAGO • CLEVELAND • PHILADELPHIA • ST. LOUIS • TORONTO
Stocks Carried in Principal Cities

PRESIDES AT AD SESSION: Edward J. Breck, president of John H. Breck, Inc., Springfield, Mass., who presided at TGA's advertising session on May 15.

to make an impartial, industry-wide showing here. But I would like to throw off the shackles of neutrality just long enough to tell you that—because of "magazine concept" programs on our network—231 advertisers were able to use NBC's facilities in 1955 . . . more than used all other networks combined.

Last year, about a dozen toiletry manufacturers were represented on NBC "magazine concept" programs. One used one participation only—another, 121 participations. And all the networks now have at least one program which allows for minute participation by single advertisers.

So I can tell you that it doesn't matter whether your budget is $50,000, $100,000 $200,000, $300,000—or a million. Network TV can be in your ad picture.

All right, all right. I can hear the president of your company saying this:

MS—President at Desk (From 6B)

PRESIDENT: (From 6B)

"Let's face it, what good can one or even six of these commercials a year do for me? That's all I can afford. What kind of an impression can a product like mine hope to make when the million dollar boys are on the top TV properties day and night?"

MR. CULLIGAN:

My answer would be this: What sort of impression are you making now?

(President Acts Surprised)
Pan Down to Magazine As Hands Thumb Through

One publication I looked at last month had eighteen toiletry ads in it. And that's probably half of the number it carries in the summertime. In TV, on the other hand, advertising density is far less than in any other medium. And, you know, there are ways of measuring advertising recall. But the decision comes down to this. You really must decide for yourself whether your print ad, large or small, surrounded by seventeen toiletry ads, plus all the others vying for the readers' attention, can match the effectiveness of one TV commercial.

Diss to Young Woman Who Turns on TV Set and Sits Down Entranced.

We Can't See Screen, and Only Know It's on by Light Reflecting Off Her Face.

TV is where you take center stage, where your product is personally demonstrated, if you choose, by famous national personalities. You have to decide whether print is more persuasive than the human voice. Whether a still life picture on a printed page can match an in-the-parlor sales demonstration.
Examine, too, how TV cuts through the welter of claims and counter claims.

Fade 6B to Black (Mr. Culligan Seen in Ballroom, Spot on Him at Lectern).

Suppose a personality who has established a record of acceptance over the years with millions of viewers, endorses your product. Suppose she or he offers personal testimony for your product's assets. Immediately your claim becomes more believable, better understood. It becomes associated with a "personal" recommendation, a friend's recommendation, if you will. The personal salesmanship of network television personalities can supply real CONVICTION for your advertising.

Let's visit one of these television personalities, indeed at HOME—for it is Arlene Francis, editor-in-chief of HOME. She is also familiar to you as a panelist on CBS's popular Sunday night quiz show, "What's My Line."

Kine of A. Francis in conference with production people; timed so she looks up & at camera when Mr. Culligan says:

"Arlene, can we interrupt . . ."

Arlene, can we interrupt your rehearsal long enough to ask you to say hello to these good people from the Toilet Goods Association, and to ask you to tell us a bit about your ideas on personal salesmanship?

Camera Zooms In

ARLENE FRANCIS: (SOF)

Thank you, Joe. Yes, I'd like nothing better than to say hello to your people from the Toilet Goods Association.

I don't know what us gals would do without your many wonderful products . . . and if it's true what they say about American women being the best groomed and being the most delightful to look at in the world, we have your products to thank for that.

Personal salesmanship . . . to me, has only one qualification for being effective and successful. And that is . . . if it's personal enough to the salesman. If we television salesmen truly believe in the products we are selling . . . that they can stand up to their advertised claims, then it's not too difficult to transmit our enthusiasm in a highly personal way to those who watch us and trust our advice.

Our obligation is pretty clear. The millions of women in our audience, really do look to us for updating their knowledge . . . for advice, suggestions, help. We couldn't afford to steer them wrong.

That's why we must know everything there is to know about a product we sell to them . . . to understand its use . . . to understand its assets for them.

(IN A DIFFERENT VEIN)

Incidentally, I have a suggestion to make for those of you interested in selling more of your products. Try daytime television! I really believe it's the shortest distance between the act of advertising and the act of purchasing. And that short and direct sales route, ladies and gentlemen, begins in a room where a lady sits . . . sometimes working . . . sometimes not . . . watching TV for a few hours during the day.

And this is where she makes up her mind about many things. These things often involve doing better as a housewife, being a better mother, and looking better.

And the married woman who views television in the daytime is just as vulnerable to products that promise an easier road to love and affection as the unmarried one.

She has a strongly motivated need for appreciation of her dual role as wife and mother.

Many thanks for letting me visit with you in this manner. Before I leave I thought you might like to see an example of a commercial being done . . . believe me . . . with an honest appreciation of the products wo th. It's for Sofskin, and was done like this. . . .

(Sound on Film)

Fade to Black

Sofskin Commercial
(Approximately 1:25)

Fade to Black

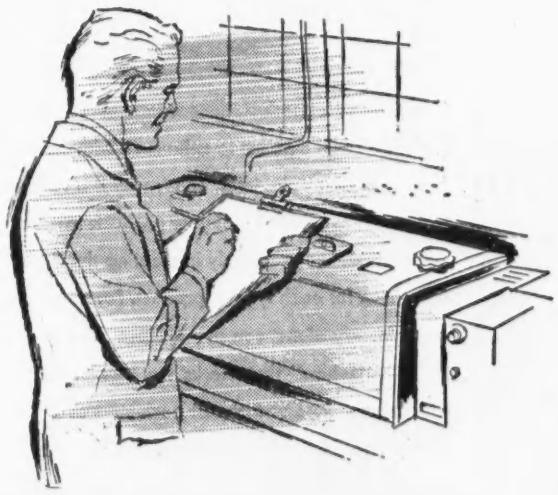
From

"SNIFTER"

to

SPECTROPHOTOMETER...

testing guarantees the purity of U.S.I. ALCOHOL



Sniff tests, spectrophotometric analyses, and many other delicate chemical testing procedures assure U.S.I. customers of specially denatured alcohol that is always uniform...always of the same high quality and purity. An unquestioned purity, *second to none*, which protects your investment in expensive ingredients used in the manufacture of perfumes, colognes, and other toilet goods.

High purity alcohol means important sales advantages for you, too — toiletries that please the most discriminating customers; customer satisfaction that means repeat sales for your products.

You can place your confidence in the *proved quality and purity* of U.S.I. Specially Denatured Alcohol. And prompt, dependable service, with particular attention given to short notice deliveries, is as near as your telephone.

You can rely on U.S.I. Specially Denatured Alcohol

For: perfumes and colognes; face and hand lotions; soaps, shampoos, shaving creams; hair and scalp preparations; deodorants; and all kinds of toilet goods.

U.S.I. INDUSTRIAL CHEMICALS CO.
Division of National Distillers Products Corporation
99 Park Avenue, New York 16, N. Y. *Branches in Principal Cities*

TGA Convention Report

Spot on Mr. Culligan at Lectern in Ballroom

MR. CULLIGAN:

Thank you, Arlene. One more thought about daytime TV. As Arlene mentioned, it offers you a concentration of women. There is practically no waste motion as there is at night, because there just aren't very many men around to watch.

Art Card:

Per Average Daytime Minute Sets in Use

1952	1956
2,600,000	6,900,000

In 1952 there were 2,600,000 sets in use in an average daytime minute. Today there are 6,900,000—a 165 percent increase.

Fade 6B to Black (Continue Feed)

But, the president of your company says —even with six or sixteen commercials a year—there's too much time in between commercials.

Well, now, actually, network TV provides extras that fill in the gaps between commercials. Your own promotion could feature your network TV celebrity, before and after each of your TV appearances.

Art Cards:

Promotion Pieces in Store

Print Ad with Arlene Francis In It

Your in-store displays could feature a picture of your TV star, and if budget forced you to use smaller ads in print media, the face or name of your TV personality would undoubtedly gain you better than average readership.

Fade 6B to Black

Spot on Mr. Culligan In Ballroom

And let me say again—you mustn't under-estimate the impression that a TV commercial makes—especially when it involves a network TV personality with an established following. You may be the third, or fifth, or twentieth as far as your share of the market is concerned. The truth is that among the millions of viewers who are loyal to your TV personality, you are no longer just another face on a crowded shelf. For them, you could easily become Number One!

The sales manager, I expect, might tell me that he doesn't want to have a personality handle his TV commercials. He may have an art style and copy in his print ads that are distinctive. Well then, you may want to use film, perhaps with animation —or with the girl you use in your print ads. But even with carefully prepared film commercials, network TV provides something extra: that's before and after editorial comment for your product. You're not out of context or disconnected from the entertainment or service features of the show.

Speaking of relaxed and integrated selling, one of the greatest exponents of this technic is our own Dave Garroway.
By means of our electronic magic carpet, let's take a trip to Atlanta, Georgia.

From 6B—Pan Down Map to Atlanta, Ga.

Cut to Atlanta—

PRESIDES OVER PACKAGERS: Edward W. Love, production manager of Bristol-Myers Company, New York, who presided over TGA's packaging session on May 16.

LS of Garroway & Merriweather

Why Atlanta, Georgia, you say? Well, these days a rare week passes that doesn't find at least one television show on the road. And this week is no exception . . . TODAY, with Dave Garroway and Lee Merriweather, originated this morning from Hurt Park in the middle of Atlanta. Dave and Lee, maybe you could tell our audience some of the reasons why television shows travel?

Zoom In On Garroway & Merriweather

DAVE GARROWAY:

We'd be glad to, Joe. First . . . hello to you members of the Toilet Goods Association.

LEE MERRIWEATHER:

And greetings from sunny Atlanta.

DAVE GARROWAY:

You asked, Joe, why we travel our shows. One of the most obvious reasons is that it gives a great deal of variety to our shows . . . sort of gives it a programming transfusion, you might say.

And, we here on TODAY realize that people make news—wherever they may be. By going directly to the people all over the face of our land, we can find out how people think and feel, how they react to different things. In short, Joe, we find there is no better way to report what is happening than by going directly to the people wherever thy may be. Besides, everyone has a certain amount of wanderlust in their system—and TODAY, in its travels, can give it to them vicariously.

But—one of the most important advantages is that it gives us an opportunity to do a big promotion and merchandising job for a client. You see, we've found out that in many cases our client's representatives throughout the country are unable, because of business pressures, to sit down and take the time to really watch their shows. And, there's another factor—New York City can sometimes seem pretty remote to a client representative—whether his district is in New Jersey or in Teaxs. So, we take our shows to him and we offer NBC's services in programming, merchandising, press aid, publicity—in his own area. This way our clients can use the power and prestige of network television to their own particular advantage on the local level.

We can easily show how this works, using Atlanta as an example—maybe my pretty young friend here would like to expound on that subject.

LEE MERRIWEATHER:

Would I! . . . Look at these (indicates stack of newspapers) . . . all kinds of articles in each one telling all about TODAY and what we're going to do here in Atlanta. And—gosh—our clients who advertise in these papers have used our TODAY logo and pictures of us in their ads. It's a real nice association.

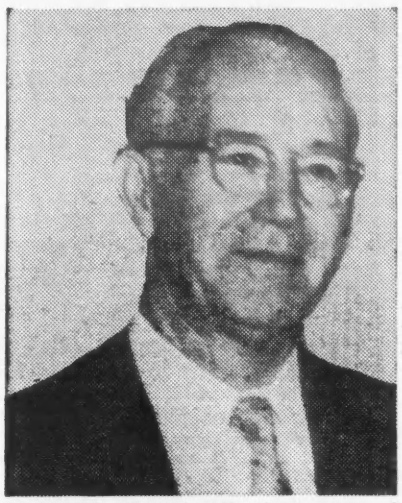
For the past two weeks the NBC local television affiliate has been showing the promotional kinescopes we made back in New York announcing our trip and we're all being interviewed on the local TV programs. And, gee, you should see the display material that's all over town. NBC's merchandising department has seen to it that there are banners and streamers with our clients' products listed on them in all the individual dealers' stores and in drug, chain and food outlets.

And the parties—I don't know when we'll

Specialists
IN THE CREATION OF
PERFUME ODORS
Exclusively

Whatever your product, the subtle touch of the Expert Perfumer has the power to enhance it with the perfect fragrance that it deserves. That's why it is so important to entrust the perfuming of your products to a Company who specializes exclusively in creating the right fragrance for each type of product. For only by specializing in perfumery alone, can one achieve the experience and "know-how" that marks the true perfume expert. Our laboratories and expert perfumers are ready and willing to serve you.

AROMATIC PRODUCTS, Incorporated
235 FOURTH AVENUE • NEW YORK 3, N.Y.
CHICAGO • DALLAS • MEMPHIS • PITTSBURGH • LOS ANGELES • BOSTON
MEMBER • FRAGRANCE FOUNDATION



DISCUSSES PRODUCTION: Lloyd Adams of Avons Products, Inc., New York, who spoke on production of the package and development of the packaging line at TGA's packaging session on May 16.

have time to sleep! We're going to the opening of a divisional headquarters of one of our clients this afternoon—and a cocktail party this evening for all our Atlanta client representatives and the press and—well, it just goes on forever.

DAVE GARROWAY:

Joe, I think we could probably go on forever too, talking about TODAY and participating programs but we all have to get back to work.

Just one more word about this show traveling business. You well know that every morning there are quite a few people congregated outside our studio window when we're back in New York. These people come from all over the country and they watch us live and work. When we travel we enjoy getting the opportunity to return the compliment. I think that pretty well sums up why we travel.

To wrap it all up, I think we should show a commercial that Lee, Jack Lescoulie and I had some fun with for the Fitch people. This is a product that is a good representative of the Toilet Goods Association—and I think you all will probably recognize the source for our humble attempts at play-acting.

(Sound on Film)
Pitch Film

Spot on Mr. Culligan at lectern in Grand ballroom

MR. CULLIGAN:

Thank you, Dave Garroway and Lee Merriweather. We have just seen another facet of network television. It not only can be a sales booster nationally, but it has the flexibility of travel. It can create a sales explosion with a local appearance. But the sales manager is persistent. After all, this company's been using print media exclusively all these years. What about waste circulation in TV, he wants to know. Of course, he's not interested in kids or men. He wants to reach plain-faced girls, between eighteen and twenty-five, with romance in their eyes.

Well, of course, And, if that's what **you** want, network television can deliver them . . . with probably a few wasted good looking ones thrown in.

From 6B:
Art Card:
Display of daytime TV profile
TV advertising bureau studies
"Strangers into customers"
CBS research material

We have spent a lot of money in finding out just who is in our audiences. How old they are . . . their income . . . what they buy . . . and so on. Just keep in mind that there are shows that attract your kind of prospect and that these shows **are** within reach of your budgets. These programs can reach working girls, working marrieds, teen agers, and so forth. You can reach young, middle-aged and older women during the day, and younger crowds in the late evening.

Spot on Mr. Culligan at lectern in grand ballroom

Now—if you're about to change your product to multiple function by adding hormones or something, why not start getting acceptance and building demand for your brand name right away? Once the TV personality has helped you make **friends, it becomes far easier for him to gain more immediate acceptance for your newly developed brand when you're ready to show it. And to help you show it—network TV has the finest showcase facilities in the world. Let's have a look by riding our magic electronic carpet clear across the country to California and our Burbank studios.**

(From 6B:)
Pan across map to California
Hollywood Cut in (commercial studio)

The gentleman you see in the middle of this group is John Conte, host of NBC's MATINEE THEATRE. They have just finished the dress rehearsal of today's show.

Conte looks up at camera

John—I've been telling our group here at the Toilet Goods Association convention that network TV has room for all advertisers—those with a small budget and those with a large one. Maybe you could explain the extraordinary showcasing an advertiser gets with your show?

Camera dollys in on Conte

JOHN CONTE:

Thanks, Joe, and greetings to you folks of the Toilet Goods Association.
Joe, you asked me to talk about the showcasing even the small budget advertiser gets with MATINEE?

Well—number one—the treatment he receives isn't any different from that which the big advertiser gets.

They both get the same representation in the show . . . which, incidentally, is a big dramatic, nighttime quality show . . . and as far as treatment of their commercial message is concerned, I sell as hard for the little guy as I do for the big.
It might be interesting to point out that on this show, the sponsor is king. This is his castle, so to speak . . .

LS of studio

. . . and only commercials are done in this studio, which is adjoining to the other studio where the show is telecast. I might point out that these are color cameras, and that all the commercials can be done here—live, and in color.

(DESCRIBE SPECIAL PRODUCTION STAFF DEVOTED JUST TO COMMERCIALS . . . SPECIAL DIRECTOR . . . UNIT MANAGER . . . ENGINEERS, ETC. . . . ENDING BY SAYING SOMETHING LIKE THIS:)

So, you see, ladies and gentlemen—on MATINEE, the show which gives an extra fancy showcasing for the advertiser with even a small budget, the sponsor is truly the king.

Thanks, Joe, for letting me visit with these good people from the Toilet Goods Association. Perhaps some day I can be working for you people.

Cut to black—6B

Spot on Mr. Culligan at lectern in grand ballroom

MR. CULLIGAN:

Thank you, John Conte. I've heard it argued that you have to have ads in print in order to show the retailers what you're doing. Well, that's not entirely true. TV, for example, has traveling projectors which can be brought right into a store.

CU—traveling projector—with film running—from 6B

On these you can show the manager your TV commercials. This is just one part of the helping hand in merchandising that a network is able to bring you. There are other aids of course.

TV's merchandisers can help you design

We have the answer to

YOUR FRAGRANCE PROBLEM in

As exclusive representatives of
Tombarel Freres, Grasse
Established 1837
we offer experience, versatility,
research and facilities associated with
a name famous for almost twelve decades

• Absolute Supreme Flower Essences •
Surfine Essential Oils • Resinoids

Put your fragrance problem up to us

Tombarel PRODUCTS CORPORATION

725 BROADWAY, NEW YORK 3, N. Y.

CHICAGO: A. C. DRURY & CO., INC., 219 East North Water Street

and produce window posters, shelf talkers and even display units.

Cu—Merchandising Displays (From 6B)

Spot on Mr. Culligan
At Lectern in Ballroom

And there is in the world of electronics a device that is being demonstrate right here—a closed circuit. This can really excite your distributors, your wholesalers, your dealers, your sales personnel. You could use a closed circuit to train your demonstrators for their in-store demonstrations, to train your salesmen and, of course, to sell your newest product to your distributor and dealer meetings.

Now—a last stab by the advertising manager: What would a broadcast executive have to say? How would he answer some of the burning questions we might put to him? Let's go to 30 Rockefeller Plaza and visit with Matthew J. Culligan, vice-president and sales director of the National Broadcasting Company.

Mr. Culligan, is there not a serious loss of company prestige and identification in buying into a participation show with six or seven other advertisers?

ANSWER—SOF

Kine—(Filmed Answers From Studio 5F)
Spot on Mr. Culligan
At Lectern in Ballroom

Our business is a peak and valley business. Seventy-five percent of our volume is moved in seasonal periods. How can I use network television?

ANSWER—SOF

Kine—From 5F

Spot on Mr. Culligan
At Lectern in Ballroom

As you know, Mr. Culligan—or should know—budgets for introduction of new products are bigger than for the normal run of a regular advertising campaign. How can I make the greatest impact on the consumer in a single day as I can in newspapers?

ANSWER—SOF

Kine—From 5F
Spot on Mr. Culligan
At Lectern in Ballroom

Are you suggesting that magazines and newspapers be omitted from my planning and that my money all be thrown to TV?

ANSWER—SOF

Kine—From 5F
Spot on Mr. Culligan
At Lectern in Ballroom

All you said is true—but, as you know, we deal in color impact—in our packaging in our demonstrations. Should we be diving headfirst into a black and white advertising media?

ANSWER—SOUND ON FILM

Kine—From 6B
Spot on Mr. Culligan
At Lectern in Ballroom

There's network television's story. Gentlemen—it can be your story.

I know there are more questions—specific questions. Of course, details about the personalities and the programs that are now available on each network can be had from a network television sales representative. He is anxious and willing to show you how network television can be put to work for you.

Thank you very much.

MUSIC: UP TO END

Cu—Mobile for Closing
Turn for Telesales Credit
Fade Out

PRESIDES OVER SCIENTISTS: Dr. Dan Dahle of Bristol-Myers Company, New York, who presided at TGA's scientific section meeting on May 17.

Albert Verley and Company's
Floranteme
...offers you unlimited possibilities for enhancing the universally popular floral note
$18 a pound
It is impossible to single out the fragrance of any one flower in this intriguing combination. The effect is that of a fresh bouquet — keen, but elusive.
Floranteme enhances any floral composition, yet is of even greater value in its usefulness as a base on which to fashion a host of modern perfume creations. It improves Lilac, Rose, Jasmin, and Lily — and blends well with any type of floral odor. It is excellent as a cream odor, perfume, or toilet water.
Experiment with Floranteme for effects that are a credit to your house and certain of acceptance among your most discriminating clientele. Write for working sample.
Where Your Dollars Have More Scents
Albert Verley & Company
Headquarters for Fragrance Appeal
1375 EAST LINDEN AVENUE, LINDEN, N. J.
21 East 40th Street New York 10, N. Y.
1018 So. Wabash Avenue Chicago 5, Illinois
222 Front St., East Toronto, Ontario
MEFFORD CHEMICAL CO., 1026 Santa Fe Avenue, Los Angeles 21, California
Representatives in all principal cities throughout the world
Synthetic Aromatic Products and Organic Isolates • Synthetic Flower Oils and Aromatic Bases • Bouquets and Finished Compositions

Scientists Give Research Reports

Papers presented before the all-day meeting of TGA's scientific section on May 17 ranged from a discussion of lauric acid-diethanolamine condensation products to a talk on azulene and its derivatives. The session was presided over by Dr. Dan Dahle of Bristol-Myers Company, New York.

Following are abstracts of the papers given at TGA's scientific conference:

Lauric Acid-Diethanolamine Condensation Products

Harry Kroll*

The sustained interest over a period of years in the condensation products of higher molecular weight carboxylic acids with diethanolamine for detergent and cosmetic applications is an excellent index of the commercial utility of these surface-active agents.

Despite the considerable amount of industrial research which had been carried out on the products formed by the reaction of lauric acid with diethanolamine, it is only in recent years that a clarification of the chemistry of this amidation process has become available.

Lauric acid reacts with diethanolamine at temperatures above 140°C. to give as an initial product, N,N-dihydroxyethyllauramide (I) which undergoes a rearrangement at the temperature of the reaction to the amine ester (II)

$$C_{11}H_{23}C(=O)N(CH_2CH_2OH)(CH_2CH_2OH) \quad \text{I}$$

$$C_{11}H_{23}C(=O)OCH_2CH_2NHCH_2CH_2OH \quad \text{II}$$

The subsequent reactions of the amine ester with either lauric acid or diethanolamine determines to a large extent the nature of the final product. Secondary reactions of diethanolamine to give small amounts of polyamines and heterocyclic derivatives complicates the interpretation of the experimental results.

Data was presented to support the proposed mechanism, as well as a brief discussion of the analytical procedures used to obtain these data. The relationship between the structure of the alkylolamides and their surface active properties was considered briefly.

*Mr. Kroll is with Geigy Chemical Corporation, New York.

Axillary Perspiration, Odors and Deodorization

W. G. Fredell and R. R. Read*

A discussion of actual results obtained in an *in vivo* study of axillary areas on perspiration, perspiration odors and deodorization of those odors.

*Messrs. Fredell and Read are with Lambert-Hudnut Division of Warner-Lambert Pharmaceutical Company, New York.

Sphere of Research

Paul G. I. Lauffer*

Cosmetic technology is highly specialized, as is evident from a review of the

TGA Convention Report

SCIENTIFIC DIRECTOR: H. D. Goulden, scientific director of the Toilet Goods Association.

topics covered in the first twenty-four numbers of *Proceedings* of the scientific section, TGA.

The same underlying scientific principles, however, shed light equally upon cosmetic problems and those of allied technologies. Toilet goods manufacturers will benefit both directly and indirectly from many research projects in the life sciences, initiated with other applications in mind.

New information on the structures and processes essential for the proper functioning of living organisms will find application in our industry in improving the efficacy, while maintaining the safety, of cosmetic preparations.

The same information will enable the Food and Drug Administration to devise more reliable, more effective, and speedier methods of evaluating the effects of new materials. Examples were cited among the hundreds of research projects now under way in universities, research institutes, and government laboratories, which may yield results of interest to our industry.

*Mr. Lauffer is with the George W. Luft Company, Long Island City, N. Y.

Physicochemical Characterization of Essential Oil Constituents and Derivatives

*Leo Levi and James L. Thomson**
*James C. Evans and Harold Bernstein***
*S. A. Forman and Norman M. Miles****

The authors presented the infrared and Raman spectra of isomeric eugenols and related compounds and illustrated the potentiality of IR and Raman technics for differentiating molecules of closely allied structure.

The X-ray diffraction patterns of a number of terpene derivatives obtained from the essential oil of Abies balsamea and of Picea mariana were shown and interpreted and the value of X-ray methods for the identification of these compounds was described.

The experimental data served to illustrate the nature and scope of a coordinated program of research comprising the physico-chemical characterization of essential oil constituents and their derivatives by means of modern instrumentation technics. The project surveyed the electronic and molecular spectra as well as the optical crystallographic properties of compounds which are of particular interest to the essential oil chemist.

*Messrs. Levi and Thomson are with the food and drug laboratories of the Canadian Department of National Health and Welfare in Ottawa.
**Messrs. Evans and Bernstein are members of the pure chemistry division of Canada's National Research Council in Ottawa.
***Messrs. Forman and Miles are with the chemistry division, science service, Canadian Department of Agriculture, Ottawa.

Dispensing Powders From Pressurized Containers

*Victor Di Giacomo**

A brief discussion of the pressurized aerosols containing large quantities of solids together with problems involved in their manufacture was given, followed by the advantages of packaging powders in aerosols. The need for product reformulation was mentioned as was the necessity for having a definite method for powder aerosol dispensing. The characteristics of

Are You Looking for

ETHYL VANILLIN C. F.
CITRONELLOL
HYDROXYCITRONELLAL
METHYL RHODIONE SUPRA
COUMARIN F (Small Crystals)
RHODINOL

These and other quality Aromatic Chemicals are offered by

Rhodia INC.

60 East 56th Street
New York 22, N. Y.

Worth Your Investigation...

CYCLAMAL

An Aldehyde of great stability and of such a high degree of purity that it can be used in the finest perfume extracts as well as in soaps and cosmetics.

RESEDALIA

An Acetal resembling the aroma of Reseda Mignonette. It is a valuable addition to all floral bouquets, and as a modifier for the purpose of rounding off all types of compositions.

VERONOL

An Aldehyde of great potency; imparts the aldehydic top note in perfumes to which it is added. It is extremely valuable as a modifier. Used from 1/10 to ¼ of 1%.

ROSANOL

An Acetal, ideal for all rose type compounds because of its fine character, great lift and extreme stability.

Aromatic specialties of interest to those who wish to produce the latest in
PERFUME FASHIONS
Write for our complete list

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MAYWOOD CHEMICAL WORKS
MAYWOOD, NEW JERSEY
ESTABLISHED 1895

TGA Convention Report

a suitable suspending agent for powder aerosols were given and a method for the pressure dispensing of powders was discussed.

*Mr. Di Giacomo is with Givaudan-Delawanna, Inc., New York.

Shampoos: Method of Evaluation

*W. R. Fredell and R. R. Read**

An *in vivo* method of determining lathering power of shampoo was presented together with a laboratory method for investigating soil or residue deposition resulting from use of a shampoo.

*Messrs. Fredell and Read are with Lambert-Hudnut Division of Warner-Hudnut Pharmaceutical Company, New York.

Toxicity Studies on Monoethanolamine Thioglycolate Cold Waving Lotions

*Ross Whitman and Martin G. Brookins**

A study of the comparative toxic properties of monoethanolamine and ammonia and also of monoethanolamine thioglycolate cold waving lotions and ammonium thioglycolate cold waving lotions, was reported in some detail.

The tests reported included animal oral toxicity studies, animal percutaneous toxicity and parallel skin irritation observations, animal eye irritation studies, and human patch testing for both irritation and sensitization reactions.

* Messrs. Whitman and Brookins are with Rayette, Inc., St. Paul, Minn.

Azulene and Its Derivatives

*H. K. Thomas and H. G. Gribou**

The chemistry of azulene has opened a new field. Today we know that the blue or greenish tint of essential oils is due to a special group of hydrocarbons, the azulenes. Many new compounds have already been synthesized.

Some of them are of great interest to the perfume and cosmetic chemists as well as to the physician and pharmacist because of their pharmacological action.

The azulenes having pharmacological importance are cham-azulene and guai-azulene. Both are identical in their effects and show anti-phlogistic, anti-allergic and reparative properties.

Certain irritations of sensitive skin provoked by some constituents of essential oils can be alleviated or even entirely abolished by the use of guai-azulene.

* Messrs. Thomas and Bribou are in the research department of Dragoco.

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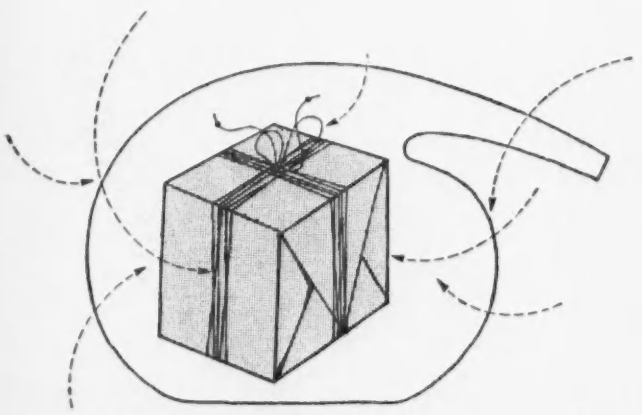

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TGA Convention Report

Word-of-Mouth Seen Plus Factor in Sales

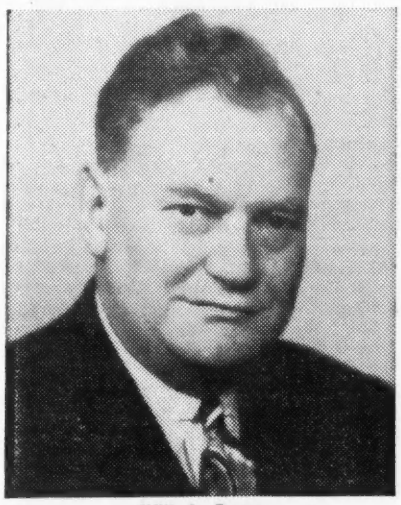
—*Continued from page 41*

tions, is a sales slip of major importance and the victim of frequent oversight.

I refer specifically to the need for recognition of this simple fact:—

"No business can prosper and succeed without the sales help for which it does not pay and of which it is usually unaware."

For years we have used the expression "word-of-mouth advertising" when some



Will A. Foster

person made a complimentary remark about a product or service.

Let's start off at once by throwing that expression into the incinerator and give it the correct name—"Word-of-Mouth Salesmanship."

It is with the motivation of this uncompensated salesmanship on your behalf that this talk will deal.

Failure to recognize the importance of, and methods for stimulating, this vital requirement for successful sales management is the sales slip which is responsible for the title of this visit with you.

Of one thing I am definitely convinced. We are dealing with more fickle customers today than ever before. In my youth a daughter carried on the brand loyalty of her mother towards many products and used them because her mother did. Today, the daughter considers it smart and modern to try new things—to break away from tradition as she exercises her freedom of choice.

This change in attitude is easy to explain. There are so many media for the exchange of thoughts and ideas today that consistent exposure to them speeds up the transfer of brand and product loyalty at an unbelievable rate.

Word-of-Mouth Salesmanship

Word-of-mouth salesmanship is one tool which you may use to retain customer loyalty and earn more salesmanship on your behalf for which you do not pay.

While we all know that "Word-of-Mouth Salesmanship" is constantly at work, perhaps too few of us have analyzed the factors that motivate it.

Many persons have referred to it as "building good will." It is admittedly true that "good will" is carried on many balance sheets as an asset of value.

Just what is meant by the expression, "good will?" Our courts have recognized that it has tangible value. For example, the first court recognition of this asset was pronounced in Lord Eldon's decision in Cruttwell vs Lye. He defined "good will" as "The probability that the old customer will resort to the old place."

The United States Supreme Court broadened this definition in its decision in Mendez vs. Holt, when it declared that "good will" includes:—

"Every possible advantage that has been acquired by the old firm in the progress of its business whether connected with the premises in which the business was carried on, or with the name of the late firm, or with any other matter carrying with it the benefit of the business."

A more recent decision of the United

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1. Bone dry bleached white shellac.
2. No. 65 extra white refined bone dry bleached shellac.
3. 8 lb. extra light pure French varnish
4. Orange shellacs all grades.

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MU 3-3090

TGA Convention Report

States Supreme Court in Dodge Bros. vs. United States says:—

"Good will is nothing more than the probability that old customers will resort to the old place."

We may safely conclude that customer loyalty is recognized by law as an asset of value.

How to Build Customer Loyalty

The first step in building this asset is to teach its value and importance to those who work for you. Employee loyalty is not enough—employee loyalty plus enthusiasm is the dynamic combination.

To obtain these most desirable qualities in an organization it is first necessary to teach their values to the persons involved.

Thoughtfulness is the basic ingredient. You may know of the hotel cigar stand chain in the midwest that will give you the purchase free if the clerk does not say "thank you."

Yet, in how many supermarkets where you shop does the checker who tabulates your purchases, takes your money and gives you change speak those two important words, "Thank You," with a tone of sincere appreciation?

Perhaps you have a force of salesmen who travel. When they get gasoline or any other purchase eligible for the expense account, teach them to ask for a receipt in your company's name.

For example, a salesman pulls into a gas station. He orders $2 worth of gasoline. He asks for a receipt in his company's name. That gasoline station attendant will remember that company because he wrote its name after receiving some of its money. No better stimulant for riveting your name in a person's mind has ever been evolved.

Obviously, you cannot expect the uncompensated salesmanship, without which you cannot succeed, unless you have earned it.

To earn this support, you must supply quality of product plus quality of service.

Perhaps during the rationing days of World War II and its associated shortages, we forgot the platform on which all successful businesses are built—the platform of quality.

I mean quality of product, of services, of personal thinking and of citizenship.

We've not always observed these principles. We do not have high quality citizenship when a bare 50 percent of our eligible voters go to the polls to vote a secret ballot under the most important citizenship franchise in the world.

We do not have high quality government when so many new aromas of political halitosis emanate from so many seats of government—city, county, state or national.

A second source of uncompensated salesmanship is the stockholders of a larger company. Properly cultivated, those with a financial interest in the success of any business enterprise will favor the products of that company.

It is unwise to presume that this desirable support will be supplied automatically. Stockholders are good prospects but still must be sold on the merits of a specific product or service of the company in which they have an interest. They will provide uncompensated salesmanship if asked to do so and if given product news about which they can talk with authority.

Sampling of stockholders is an excellent tool for stimulating them to furnish "word-of-mouth salesmanship."

How P. A.'s Can Help

Purchasing departments can help build favorable comments among salesmen who call on them, even though no purchases are made. A salesman is human. He likes to be treated courteously.

May I suggest that any of you with purchasing departments talk with those who do your buying. Do they realize that every salesman is also a consumer? Even though the salesman may not do business with you, he will speak well of you if treated courteously.

A fourth source of "word-of-mouth salesmanship" is your present customers and users. Satisfied customers will recommend you without thought of compensation. One of the most overlooked angles of customer relationship is the handling of complaints. Always welcome complaints. They give you a chance to do a real sales job for your company if properly handled.

This simple outline of procedure in dealing with complaints will help you earn "word-of-mouth salesmanship."

1. Express a sincere interest in adjusting the complaint to the customer's complete satisfaction.

2. Get all the facts bearing on the complaint.

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TGA Convention Report

TALKS ON EFFICIENCY: William T. Ropp of Pack-It, Inc., who discussed efficiency and economy in packaging operations at TGA's packaging session on May 16.

3. Admit error promptly if the complaint is well founded.

4. Apologize for the error sincerely.

5. Assure the customer that the same error will not happen again.

6. Obtain customer's expression of satisfaction with the explanation given.

Many products and services lend themselves to comments, both favorable and unfavorable, from critics and impartial agencies.

The success or failure of many a new Broadway play depends on the reviews of the critics. Favorable comments of food editors have helped the sale of many new food products. Architects influence the choice of materials for a new home or factory.

There are many impartial agencies whose written or spoken comments have a definite influence on the sales and acceptance of many products. Examples of such agencies are government bureaus and personnel. The Bureau of Standards, county and home demonstration agents are only a few of those who are in government service who may influence the public support of your policies and product.

Providing Product Data

Many private and semi-private agencies should be provided with information on things you sell. The testing laboratories of magazines are important factors in the sale of foods, appliances and home furnishings.

There are research agencies whose conclusions help or hurt the sales of a commodity. The ratings on radio and television shows may determine their survival.

The sixth source of uncompensated salesmanship is the recommendation of the professions. This group includes doctors, dentists, nurses, dieticians, home economists and a host of other categories.

Their good word for you may be indispensable to your progress. When I was in charge of fresh milk sales for my company in California in the 1930's, we surveyed present customers to find out why they were using our products. To our amazement, we found that more than 20 percent were on our books because of the recommendation of a member of the professions.

I feel certain that you now realize that you can't win alone, that you need the friendly helpfulness of others to succeed.

You have the right to ask at this point, "O.K., I agree with you but how do I go about earning such support?"

In the preparation of this talk I asked Young & Rubicam, our advertising agency, for help in listing the human motives that prompt uncompensated salesmanship. Here are some we have agreed on.

Uncompensated Salesmanship Motives

1. A desire to share.

There is some unselfishness in most people. We like to share the pleasures and satisfactions we have enjoyed by using a product or service.

2. A desire to help.

We all like to help a friend with information about things we have used that might be of benefit to him or her. This desire is sincere. The only compensation we expect is a "thank you," or later confirmation that our suggestion had merit. This desire covers everything from the best food for a

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TGA Convention Report

baby to the best remedy for getting gas off the stomach.

3. A desire to impress.
It is a common human trait to impress others that we are alert, live comfortably and are modern in our thinking. We like our friends to feel we have good judgment.

4. A desire to justify.
Many times we make decisions and do things on our own initiative. When others follow the same course and report favorable results, we confirm greater confidence in ourselves. We justify the adventure of pioneering a decision.

5. A desire to belong.
Each of us likes to belong to a respected segment of society—to do the approved thing that earns the compliments of friends.
This common trait may influence where we live and the organizations to which we belong. It will influence our choice of purchases. We will all admit we send gifts from stores we may not regularly patronize because that store, and its label, identifies us as belonging in the upper strata of society.

6. A desire to boast.
The difference between socially acceptable boasting and boring bragging is a narrow one. We all engage in it. We appreciate being considered an expert and authority. We seek comments of praise that keep our ego inflated.

Conversion Into Sales

Now, how can you harness these human characteristics and convert them into sales help for which you do not pay.

First, organize your plan to employ them. List all groups and persons we have mentioned who may influence the sale of your products and services.

Then, decide the many little thoughtful things you can do that will earn you their sales help for which you do not pay.

Study your present program of employee, trade and professional relations so that no stone is left unturned to influence them favorably.

In reaching the general public the two recognized sales tools are public relations and advertising.

PRODUCT DEVELOPER: Albert R. Jasuta of Bristol-Myers Company, New York, who discussed product development at TGA's packaging session on May 16.

Package—Idea to Output Line—Discussed by Jasuta

How a package is developed—from the original idea to the production line—was discussed at TGA's packaging session by Albert R. Jasuta, package development unit chief for Bristol-Myers Company, New York. Mr. Jasuta told the packaging conference that this transition includes these steps:

Statement of the problem.
Presentation of possible solutions.
Evaluation, testing and preliminary costing.
Development of sources of supply.
Final costing on both materials and methods.
Rating of potential packages followed by a choice.
Preparation of specifications to the mutual satisfaction of both supplier and user.

Drawing from his own company's experience to illustrate, Mr. Jasuta stated that the Bristol-Myers approach is one of a dual team, consisting of a package committee and a deal packages task group.

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Essential Oils, Aromatics

Citrus oils again were the leading factors in the essential oils market last week, dealers reported. Lime oil advanced in both qualities while orange and lemon continued very firm. A movement in lemon oils, which though contrary to the actual position of the market, reflected no weakness, was the Exchange brand lemon oil drop in price. Previously listing for $6.00 per pound (Exchange material is USP standard) or $1.25 above the listings of independent growers, exchange last week dropped in price to $5.00. This places the oil in a much more favorable position, considering its high standards, than it had been in previously at the higher listing.

The South American safrol bearing oils once again moved on their steady downward trek. Bois de rose slipped 15c. per pound in price to a $3.25 quote, one of the lowest positions it has known. With it went three of the safrol bearing aromatic chemicals: linalool, linalyl acetate and safrol. Dealers continue to attribute the softness of bois de rose to the presence of cheaper Peruvian material on the market. However, many still contend that much of the bois de rose is Brazilian material that has been sidetracked and is being unloaded at lower prices through Peruvian channels.

Dalmation sage oil softened on spot last week, dealers noted. Th new listing of $4.25 per pound is 25c. less than the previous quote.

The seeds and spice also showed little tendency toward strong movement. Cassia moved sluggishly in spite of firmness abroad. Cloves strengthened somewhat as cables from Madagascar continued to advance. Nutmegs and mace remained virtually adrift on spot. Dealers said that buyers have shown virtually no interest in ginger. It was also noted that the closing of the paprika shipping season should have an effect upon the commodity's market position soon.

Floral oils from Grasse, Italy and North Africa continued to show strength throughout. The market strength is attributable to the damage done by late frosts and storms during the final months of the winter. Neroli oil continues out of sight in price as do a number of other oils which were so thoroughly damaged as to be nearly non-existent on spot. The situation was stiffened even further, dealers noted, by the fact that supplies on spot were very short at the time of the damage and replacements of any sort have been at best, particularly short.

Price Trends

Advanced

Oil, lime, Mexican, 40c. per lb.
West Indian, 10c. per lb.
Pimento, Jamaica, 11c. per lb.
Mexican, 1c. per lb.

Reduced

Anise seed, Spanish, 1c. per lb.
Syrian, 1c. per lb.
Clove, Madagascar, 1c. per lb.
Coriander seed, Moroccan, ¼c. per lb.
Linalool, 40c. per lb.
Linalyl acetate, 90c. per lb.
Mace, West Indian, 15c. per lb.
Nutmeg, Indian, 2c. per lb.
West Indian, 3c. per lb.
Oil, bois de rose, Brazil, 15c. per lb.
Sage, 25c. per lb.
Paprika, Roumanian, 2c. per lb.
Spanish, 1c. per lb.
Yugoslavian, 4c. per lb.
Poppy, Argentine, ½c. per lb.
Pepper, white, 4c. per lb.
Safrol, 55c. per lb.

Comparative Price Indexes

(100=1940 average)

Last week	Prev. week	Last month	May 20, 1955
137.65	137.67	135.39	137.52

For Current Prices see Page 9

The last shift in Exchange oil prices was in February of last year. At that time, it moved upward from $5.50 to the $6 per pound quote.

The present shift, located as it is in the middle of the seasonal period, should give more of the heavy sales to the Exchange material.

Lime — This oil, leading the way in price advancements in the upward citrus oil market, showed movement in both qualities on spot last week, dealers said. Both West Indian and Mexican quality lime oil climbed to $3.50 per pound listings. This was a 40c. per pound climb for Mexican and a 10c. advancement for West Indian. The market should continue strong for some time, dealers reported.

Orange—One dealer reported last week on the extensive damage done to Spanish orange groves and crops during the late winter storms. The extent of the loss, according to producers, is about 40 percent. The annual crop of Spanish oranges, in a normal year, is about 1,000,000 tons. The crop for the following year is also expected to be stunted due to the loss of this year's blossoms. Further information from Grasse also confirmed the early and extensive reports of near complete damage there. Reports state that less than 5 percent of the crop will be available for processing.

Peppermint—The condition of this oil's market remained a little vague on spot last week, dealers reported, as reports of increased acreage continued to come in. Spot prices, though somewhat under what they were a couple of months ago, might have fallen even lower but for the position of and demand for high test peppermint oil, dealers said.

Pimento Leaf—This oil remained soft throughout the market last week, dealers reported. Shipping prices reportedly had declined by approximately 15c. per pound and trade on spot was said to be lagging due to the late spring. Other oils used in pickling have also been reported as quiet.

Sage—Dalmation sage oil softened on spot last week, dealers here reported. The new listing of $4.25 per pound is 25c. per pound less than the previous quote, it was noted. Some dealers suggested that shadings would reach even lower than the point of decline. The prevailing soft tone has been attributed to lack of demand. Clary sage continued in short supply with resultant stiff tones on the spot market scene, dealers reported. Further advances are expected.

Essential Oils

Bois de rose—This oil once again last week moved downward in what has been the steadiest declining market in the essential oils field. The new listing of $3.25 per pound is 15c. less than the previous quote. Although the commodity, along with the other safrol bearing South American material, has remained soft for the past weeks, this was the first actual price decline within the month. Dealers attributed the ease to the continued presence on the market of Peruvian quality material which continues to undersell Brazilian bois de rose. Dealers contend that much of the material moving out of Peru is actually Brazilian material that could not be moved at the going price.

Bergamot—Though earlier reports from Italy had the bergamot crop effected during the late frosts and snow storms, dealers report that the shifts of the oil on both spot and other markets has not been a strong reflection of this.

Cedarwood — Dealers have reported over the past months that prices have showed a continued ease, it was noted last week. However, most dealers said that demand has showed some steady strength throughout and should continue to eat up surpluses at a good rate. The shift in the market, if there is to be one, is reportedly not far off, some dealers said.

Lemon—Dealers on spot last week reported a $1 per pound decline in the outside listing for California quality material. The quote was that of the Exchange brand group. The new listing is $5 per pound in 35-pound cans or 385-pound drums. Dealers note that at the new listing they will book contracts for delivery over six months, subject to quarterly revision. The new Exchange quote, for the first time in a number of months, has brought it within competing distance of the independent price of $4.75 per pound.

Aromatic Chemicals

Linalool—This commodity took another sharp drop in the market last week, dealers reported. The new inside quote of $4.10 per pound is 40c. per pound less than the previous listing. Dealers attributed the price shift, as they did the earlier one, a number of months ago, to renewed competition in source bois de rose market.

Linalyl Acetate—This aromatic chemical, also a bois de rose derivative, declined last week dealers said. Its price is gen-

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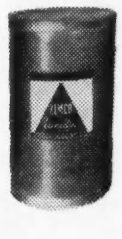

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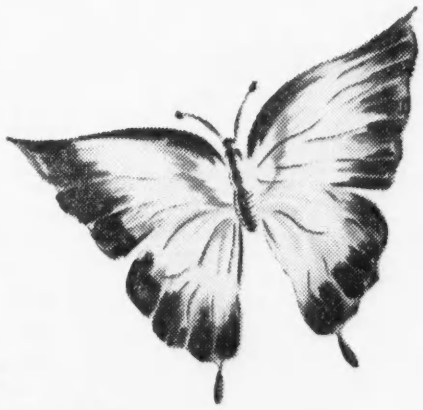

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erally attuned to the ascents and descents of linalool. The new listing for linalyl acetate is $4.50 per pound. This 90c. per pound less than the previous quote.

Safrol—Dealers reported a 55c. per pound decline for this aromatic chemical, dealers said last week. The new listing is $1 per pound. The price drop was in keeping with the general movement of South American safrol bearing material.

Seeds and Spices

Anise seed—This commodity declind slightly in both qualities last week, dealers reported. The new listing for Spaninsh quality anise seed is 29c. per pound or 1c. less than previously quoted. Syrian material also declined 1c. to a 28c.-29c. per pound range. The situation has declined, dealers noted, because of a lack of demand on spot. Another factor, it was noted, was the impending newcrop arrivals.

Mace—This spice continued, along with nutmeg, to decline from the heights to which it had climbed following the serious storm damage to crop and trees last year. Ease was felt throughout the mace market, though only one of the qualities actually declined in price. West Indian fell 15c. per pound to a $2.75 quote. East Indian continued at a $2.15-$2.40 per pound range.

Nutmeg—Continued ease was shown by this market last week dealers noted. Both qualities declined to 63c. per pound listings from previous positions of 65c. for East Indian and 66c. per pound for West Indian. Dealers attribute the shift to lack to interest on the part of buyers.

Pepper—The market for this commodity continued to show no movement of any importance. Dealers claimed last week that a division in the market seems to be appearing. Malabar/Lampong prices, it is claimed, are controlled by a slightly different supply picture than Sarawak, which must contend with the marketing of the new crop. Malabar lampong prices are not completely unaffected by the fluctuations of Sarawak, the dealers say, but arrivals of the former have been tapering off for months. In time, they can become somewhat stronger whereas new crop shipments of Sarawak will furnish the spot with sizable imports commencing late in July. Reports from Singapore report heavy business in new crop shipping positions for May, June and July shipments.

Pimento—Jamaica quality of this spice climbed heavily on the spot market last week, dealers reported. The new quote is 85c. per pound, 11c. higher than the previous listing. Dealers attribute the climb to a workers' strike at source. It was reported that only the higher quality materials have been shipped, thus shoving the price up to the listing for the higher calibre material. The situation will probably continue to firm-up until the labor problem is solved, one dealer noted. Mexican materials also, as a result of the Jamaican development, climbed 1c. per pound to a 58c. to 59c. range.

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Textile, Leather Chemicals

Steady consuming demand for textile and leather chemicals principally for prompt needs was noted last week. Firm tone prevailed throughout the market and quotations were maintained for the entire list. With production of potato starch in Maine limited and moved against former contracts, buyers had to raise bids to obtain supplies and light trading took place at fractionally higher prices. This further strengthened the local market and spot stocks were firmly held.

Tapioca flour continued strong, reflecting the scarcity of offers of new crop from Brazil. Old crop has been cleaned up. Technical egg albumin was in limited supply and firm at the recent sharp advance. Other egg derivatives were unchanged and steady. Good consuming interest continued for corn starch due in part to the higher cost of potato starch. The increased cost of potato starch also brought out more interest in replacements from Holland. Sago flour was quiet, but steady. Good volume of chemicals was moving into consuming channels against contracts.

Trading in tanning materials was still spotty, though the volume of business done during the first quarter, was reported materially larger than for the same period last year. Tanners, however, continued to restrict orders to nearby shipment, keeping inventories down to about three months supply.

Producers' shipments of rayon and acetate yarn and staple and tow in April totaled 85,800,000 pounds, a decrease of 15½ percent from 101,800,000 pounds shipped in March and 23½ percent below April 1955 shipments of 112,100,000 pounds, according to the Textile Economics Bureau. Shipments in April 1956 consisted of 84,700,000 pounds for the domestic market and 1,100,000 pounds to foreign countries.

Shipments last month were lower for all types of yarn and staple except acetate staple and tow which amounted to 5,000,000 pounds compared with 4,800,000 pounds in March. April shipments of high tenacity rayon yarn were 31,500,000 pounds, 14½ percent under the 36,900,000 pounds shipped the previous month. Regular and intermediate tenacity rayon yarn deliveries in April totaled 14,700,000 pounds, 7½ percent below the 15,900,000 pounds in March. Major suppliers of foreign staple during February were the United Kingdom which sent in 2,508,000 pounds, Western Germany, 2,505,000 pounds and France 1,391,000 pounds. The first two countries, as in January continued to send in almost half the total rayon staple imported.

Price Trends

Advanced

Potato starch, Maine, ¼c. to ½c. per lb.

Reduced

None

Comparative Price Indexes

(100—1949 average)

Last week	Prev. week	Last month	May 20, 1955
107.41	107.41	107.37	103.95

For Current Prices see Page 9

Chemicals

Bichromates—Market remained steady and unchanged. Good volume continued to move into consuming channels against contracts. Demand for spot delivery also was fairly active.

Sodium Acetate—Moderate demand was noted for prompt delivery. Quotations were without change and well held.

Sodium Hydrosulfite — Consumers absorbed sizable quantities for prompt delivery. Quotations were unchanged and steady.

Sizing Materials

Corn Starch—Consumers continued to absorb good sized volume for prompt delivery. Interest in later deliveries was more active. Quotations were unchanged and steady. Pearl was quoted at $7.17 per 100 pounds, carlots, paperbags, New York delivery and powder, $7.29, same basis. Smaller quantities were 15c. per 100 pounds higher.

Egg Albumin — This market remained unchanged and steady. Trading was moderate, principally for prompt needs. Flake was held at $2.04 to $2.06 per pound and powder, $2.08 to $2.10, depending upon quantity. Technical was in limited supply and maintained at the recent advance to 98c. to $1 per pound, spot, as to quantity.

Egg Yolk—Firm tone prevailed, with quotations well held at former levels. Stocks on spot were unchanged at $1.12 to $1.14 per pound, spot as to quantity. Demand was reported improved for actual needs.

Potato Starch—Trend of the Maine market continued upwards. Prices were again advanced ¼c. to ½c. per pound. Carlots were moved at 7½c. and 7¾c. per pound, f.o.b. mills, for immediate delivery. Stocks at mills were scarce and with offers almost nil, buyers had to raise bids. Production was still light and absorbed against former contracts. Idaho starch was unchanged and firm at 6c., carlots, f.o.b. mills. Stocks on spot were firm and closely held at 8½c. to 9½c. per pound, exwarehouse, according to quantity. Interest in Dutch was more active as replacements have become competitive with domestic material. Prompt shipment from Holland was available at 7.9c. per pound, carlots, exdock, duty paid.

Sago Flour—Conditions in this market remained steady, despite limited trading. Stocks on spot were maintained at former levels. Raw was quoted at 7c. to 7½c. per pound, and refined, 8¼c. to 8¾c., exwarehouse according to quantity.

Tapioca Flour — Trading in Brazilian flour for shipment was reported at a standstill due to the scarcity of old crop and the lack of offers of new crop, with the result that buyers were on the sidelines. Siamese flour medium grade was available at 5.60. to 5.70c. per pound, carlots, exdock, depending upon shipment. Stocks of Brazilian flour on spot were firmly held at 8½c. to 10c. per pound, exwarehouse, as to quantity.

Tanning Materials

Leather production in March was slightly smaller than in February, according to Tanners Council. Output of cattle hide and kip sides leather in March was estimated at 2,247,000, against 2,293,000 in February; calf and whole kip skins, 819,000 against 802,000; goat and kid skins, 2,235,000 against 2,377,000 and sheep and lamb skins, 2,310,000 against 2,525,000.

Chestnut Extract — Consuming inquiry was light and spotty. Prices were without change and steady. Solid extract, guaranteed 60 percent was quoted at 9⅛c. per pound, carlots, exdock, plus duty, prompt shipment and powdered, 70 percent, 10⅝c. same basis.

Cutch—Replacements continued steady at 8½c. per pound, carlots, exdock, plus duty nearby and later shipment. Consuming interest was fairly active.

Mangrove Bark—Buying interest lagged, though replacements were unchanged and well held. African bark was quoted at $68 per ton, exdock; Colombian, $58, and Ecuadorian, $55, same basis for prompt shipment.

Myrobalans—Buying interest was still spotty and confined to nearby shipment. Primary market was steady and quotably unchanged. No. 1, assorted was quoted at $64 to $65 per ton, exdock; crushed, $79 to $80, and Bombay, $63 to $64, same basis.

Quebracho Extract—While business was reported quiet, shipments were maintained at former levels. Prices were without change. Solid ordinary, guaranteed 63 percent tannin quoted at 11 21/32c. per pound, exdock, plus duty and clarified 64 percent at 12 23/64c. same basis.

Valonia—Buying interest was reported slow. Primary market was unchanged and steady. Cups were quoted at $58 per ton, carlots, exdock, prompt shipment; beards were nominal at $75 to $76 per ton, same basis. Extract was named at 8½c. per pound, carlots, exdock, plus duty.

Wattle — Consuming inquiry continued light, chiefly for nearby shipment. Quotations were well held for all grades. Fair average bark was quoted at $98 per ton, carlots, exdock and merchantable, $94 per ton, same basis. East African extract was held at 9⅞c. per pound and South African, 10c., carlots, exdock, plus duty.

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Petroleum Derivatives

The market for petroleum derivatives continued to reflect, on the one hand, the strength of a seasonal market, and on the other hand, bated movement of anticipatory buying. The former is particularly true in the solvents and diluents going into paint, the insecticides and agricultural chemicals. Dealers have claimed outstanding strength for mineral spirits (both special and regular), partial aromatics, benzol and xylol. Paint manufacturers reported sales that may even top last years record climb. However, the possibility of a steel industry shut down because of labor-management strife, has made for wariness throughout the industry. Dealers noted that with the automotive industry already showing a bad lag, for the steel industry to show any weakness on top of it would not be of any help to the market. Benzol, though showing continued strength has been dealt a blow by the appearance upon the market of foreign material selling at 4c. per pound less than the domestic commodity.

Price Trends

Advanced
None
Reduced
None
Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	May 20, 1955
104.53	104.53	104.53	104.42

For Current Prices see Page 9

Solvents and Diluents

Benzol — Ambivalance ran rampant in the market last week, dealers reported, as conflicting forces continued to dominate a nearly indefinable situation. Foreign material (particularly stuffs from Russia) continued to arrive on the spot scene at prices cheaper than the going domestic rate. In more austere times, this would undoubtedly, dealers noted, have a strong effect upon the market. However, a question about the future steel industry stability (resulting directly from labor-management relations difficulties and indirectly from more basic economic causes) has led dealers to go overboard for stockpiling in anticipation of a supply cut-off. The stockpiling continues unabated, continuing for the time, at least, to give a certain health to the market.

Cleaners Naphtha — Dealers reported last week a conservative firming of this market. The strength has been attributed to the seasonal up-swing. The pattern is relatively that of last year, dealers said. This reflects inroads being made by the synthetic fibre industry into the market. The sales last year were cropped and below those anticipated because of the lessened demand caused by the growing use of synthetic fibre in summer clothing manufacturers. Dealers do not anticipate any relief for the situation.

Mineral Spirits—Both demand and production remained on a high level for this commodity last week, dealers reported. Growing demands from the paint and construction seasonal markets easily coped with the wanning automotive industry situation. Paint dealers reportedly are running into sales figures that even surpass those of last year's record making scope.

Partial Aromatics—Spot market figures showed growing volume sales and production for this commodity, producers reported last week. Dealers attributed the growth to developing use of partial aromatics as a cheaper replacement for the more expensive fuller aromatics. Although there are yet places where the partials are not of high enough calibre to replace the full material, the areas where partial aromatics can be used are so plentiful as to offer room for much expansion.

Rubber solvents—In spite of seasonal figures and demands, dealers appeared worried last week about the over-all picture. Continued declines in the automotive industry scene reflects the future demand pattern for the rubber industry, it was noted. Though the seasonal queries should buoy the industry up for a while, in the final analysis, rubber is to a great degree dependent upon the ups and downs of the automobile. Dealers hold out no great hopes for the immediate future, though, they said, development of demand in new areas might relieve the situation later on.

Xylol — Agricultural chemical and insecticide sales continued to give strength to this market. Seasonal figures also acted to bucy it up, dealers said last week. The condition, as a whole, for xylol has been one of good and even growing strength for some time now, it was noted. The scene is not expected to shift, in spite of the troubled air of the automotive industry, for some time.

Lighter Fractions

LPG's—Dealers reported a continued slackening of interest in propane and butane last week, though they note a tendency on the part of many buyers to fill needs now for the early weeks and months of the seasonal period. However, slackness due to the summer months is expected to continue for the next months.

Waxes

Microcrystalline—Sales figures showed good strength for microcrystalline last week, dealers reported. The figures are a reflection of the over-all picture for the wax. Dealers attributed the continued strength to the seasonal market as well as the constancy of the wax container market.

Paraffin — Export sales, particularly in the wax container field, are a strong contributing factor to the firmness of this market, dealers noted last week. Though the ratio of paraffin-microcrystalline used in the wax container coating is dipping somewhat for paraffin, it has not, as a whole, greatly affected the market. Demands from other areas of the market continue to grow, dealers noted.

Miscellaneous

Crude Oil—Daily average production of crude oil and lease condensate for the week ended May 4, 1956, was 7,084,433 barrels of which 130,150 barrels were lease condensate mixed with crude oil losing its identity as such.

Reports received from refining companies indicate that the industry as a whole ran to stills on a Bureau of Mines basis approximately 7,626,000 barrels of crude oil daily.

Current reports of the industry for the week ended May 4 indicate a decrease in crude oil production and an increase in crude runs. According to the API, the daily average output of crude (including lease condensate) was 7,084,000 barrels, a decrease of 62,000 barrels from the preceding week. Daily average crude runs to stills of 7,626,000 barrels were 179,000 barrels above the preceding week and 597,000 barrels above the week ended May 6, 1955.

The Bureau of Mines estimated the amount of domestic crude that will be consumed or exported this month at 6,970,000 barrels daily compared with 6,940,000 barrels per day forecast for April of this year. Actual data for February show a crude production of 7,208,000 barrels daily, a decrease of 66,000 barrels daily in stocks of domestic crude oil, and an indicated demand for domestic crude oil of 7,274,000 barrels daily. Actual crude runs in February averaged 8,047,000 barrels daily, including foreign runs of 853,000 barrels daily. Current data for March indicated total crude runs of 7,907,000 barrels daily, including foreign crude runs of 897,000 barrels daily.

Crude Oil Stocks

Stocks of domestic and foreign crude petroleum at the close of the week ended May 5 totaled 275,420,000 barrels according to data reported to the Bureau of Mines. Compared with the total of 273,522,000 barrels for the preceding week this represents an increase of 1,898,000 barrels comprising an increase of 1,401,000 barrels in stocks of domestic crude and an increase of 497,000 barrels in stocks of foreign crude.

Dodge & Olcott Award Regulations Are Amended

Dodge & Olcott, Inc., New York, has announced that the rules for the 1956 competition for the D&O achievement award have been amended.

Nominations are now open to any contribution to the growth and general welfare of the meat packing industry that is of recent origin, but in use long enough to have proven its advantageous qualities in some phases of the industry.

The award is no longer limited to achievements made public during the award year. Nominations may be submitted at any time until closing date—August 1, 1956.

USDA Appoints Taylor After Steiner's Retirement

Changes in the leadership of plant nematology research have been announced by the Department of Agriculture. Dr. Gotthold Steiner, a specialist in this field in the department for thirty-four years and head of USDA work on nematodes for the past twenty-four years, retired April 30.

Albert L. Taylor, of the horticultural crops research branch in USDA's Agricultural Research Service, succeeds Dr. Steiner as head of the Branch's nematology section at Beltsville, Md.

GSA Directed

—Continued from page 4

barter or exchange of agricultural commodities for the national and supplemental stockpiles:—

Abrasives, crude aluminum oxide; asbestos, amosite; bauxide, Jamaica; bauxite, Surinam; bauxite, refractory; beryl ore; beryllium-copper master alloy; bismuth; cadmium; chromite, metallurgical (including ferro-chrome); chromite, refractory; cobalt; graphite, Ceylon; iodine; lead.

Also, magnesium; manganese, battery, synthetic dioxide; manganese, chemical, types A and B; manganese, metallurgical (including ferro-manganese and electrolytic manganese); mica, muscovite block; mica, muscovite film; mica, muscovite splittings; mica, phlogopite splittings; quartz crystals; shellac; silicon carbide, crude; talc, steatite block; zinc.

ODM Explains Action

ODM said that these authorizations will not affect the preference which is to be given to domestic purchases, but merely permit the acquisition of additional materials through barter or exchange of agricultural commodities for the national stockpile or the special supplemental stockpile established under the Agricultural Trade Development and Assistance Act.

The Act specifies that materials may be acquired for the supplemental stockpile over and above the requirements for the strategic stockpile. Once materials are acquired for the supplemental stockpile they cannot be released unless congress itself grants permission.

Mica Rules Revised

GSA also announced a revision of the regulation under which it purchases mica from domestic suppliers.

The new rules, effective May 15, revise upward some of the prices which the Government will pay for deliveries of mica to its receiving depots at Spruce Pine, N. C.; Custer, S. D.; and Franklin, N. H.

Also changed is the "alternate" provision relating to hand cobbed mica. The "alternate" provision gives the supplier the election of delivering finished mica or permitting the government to perform the rifting (splitting) and trimming. For rifting and trimming the government will make a deduction of $4.00 per pound.

GSA also said that it is installing in each of its receiving depots sets of representative samples of mica, so that in the event of differences of opinion as to the quality of material, it can be measured against the samples.

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Aliphatic Organics

There were no price changes reported in this market last week. A strike shut down the Niagara Falls plant of one major maker of a diversified line of chemicals last week. The immediate effects were not of great consequence from the consumers standpoint, in view of the generally good availability of chemicals. The crude glycerine market has been showing some strength of late in contrast to the weakening trend in the past three months. Prices were not materially affected in the spot market however. Refined grades of glycerine continue to move at a brisk rate, according to producers, and statistics accumulated to date indicate a disappearance in the first quarter of some 2,000,000 pounds over production totals. Supplies of refined glycerine are adequate.

Butadiene, on the other hand, appeared destined to remain tight for some time. Despite the slight easing in the pace of automobile production this year, replacement tire demand as well as a heavy export demand has kept a strong pressure on butadiene producers to meet manufacturing requirements.

The solvents group, as a whole, continues to enjoy a heavy demand. The cutback in lacquer consumption in automobile manufacture has not made any appreciable dent in solvent inquiry. The price advances which went into effect on virtually all the solvents on the first of the year has had little, if any, noticeable affect upon usage since they represented only a moderate increase consonant with the steady rise in production and freight costs in recent years.

Consumption of ethyl alcohol continues heavy with the production of butadiene from alcohol accounting for a sizable proportion of industrial requirements. To what extent butadiene from alcohol will be produced this year was a matter for conjecture and dependent to a considerable degree upon the extent of the demand for synthetic rubber. Natural rubber prices were reported to have declined considerably since the first of the year and a correspondingly larger amount of this material was expected to be used this year. The cutback in auto production should also serve to curtail the demand for rubber and hence rubber chemicals, although the industry can easily up its production if business warrants, later this year.

Acetic Acid—Inquiry continues at a good level, according to trade sources. Prices were unchanged and expected to hold for the balance of the quarter..

Imports of acetic acid totaled 1,894,000 pounds in January. Imports for the whole of last year were 2,807,000 pounds compared to 1,538,000 pounds in 1954. Exports in 1955 were 879,000 pounds compared to 443,000 pounds during 1954.

Alcohol—Demand for alcohol continued at excellent levels. Consumption of ethyl alcohol this year has been reflective of the generally heavy rate of productivity in industry. Ethanol is used in a wide and diversified number of applications. One of the largest individual uses of ethyl alcohol is currently the production of butadiene. Demand for this rubber-making chemical has continually exceeded the output from petrochemical sources and has necessitated the return to the war-time practice of producing it from ethyl alcohol on a limited scale.

The price structure in ethyl alcohol continues quite firm. Supplies were adequate to meet trade requirements although not excessive.

Figures on production, withdrawals, and stocks released by the Alcohol and Tobacco Division of the Internal Revenue Service, pertaining to ethyl, completely denatured, and specially denatured alcohol during March, 1956, compared with March, 1955, were as follows:—

Production

	Gallons 1956	Gallons 1955
†Ethyl	40,837,663	35,614,750
*Completely denatured	47,750	51,463
*Specially denatured	26,580,891	20,352,613
Withdrawals		
†Ethyl, tax paid	1,061,276	927,392
tax free	49,770,282	38,222,830
*Completely denatured	42,675	43,034
†Specially denatured	23,644,023	20,601,997
Stocks		
†Ethyl	35,727,359	48,108,519
*Completely denatured	28,917	14,225
*Specially denatured	9,552,284	5,223,382

*Wine gallons. †Proof gallons.

According to the Alcohol and Tobacco Tax Division, materials used in industrial alcohol plants in March, 1956, and March, 1955, were as follows:—

	Pounds 1956	Pounds 1955
Corn and corn products	2,709,276	1,684,206
Rye and rye products	.....	411,700
Malt and malt products	161,944	281,410
Wheat and wheat products	1,525,700	1,997,778
Sorghum grain and sorghum grain products	936,700	1,218,170
Total grain	5,333,620	5,593,264
Ethylene gas	9,499,311	7,641,501
Other materials	37,273	974
	Wine gallons 1956	**Wine gallons 1955**
Molasses	9,896,274	3,796,780
Ethyl Sulfate	18,034,600	20,371,605
Sulfite liquors	23,492,000	24,447,100
Other materials	2,346,473	2,703,454
†Production used in redistillation	425,455	3,282,171

† Proof gallons.

Butyl Alcohol—Inquiry continues brisk. Supplies are adequate for current needs, while prices are firm and expected to hold steady for the balance of this quarter.

Carbon Tetrachloride—The spot market was unchanged. Inquiry for this chlorinated solvent was reported to be reasonably steady in view of shift in some industries to other chlorinated solvents. The growing popularity of dry chemical-type fire extinguishers has also cut into the demand for carbon tetrachloride for this application, it was noted. Prices were steady.

Imports of carbon tetrachloride totaled 2,371,000 pounds in the January to December period of 1955 compared to 71,000 pounds brougt in during the year preceding. Exports aggregated 1,743,000 pounds in 1955 compared to 2,022,000 pounds in 1954.

Glycerine—The spot market was reported to be holding at excellent levels. Demand for refined glycerine remains high and trade sources expect consumption to be maintained at current levels for the balance of this quarter at least. Supplies were adequate and expected to continue in the immediate future. Rumors persisted that a new producer would be entering the synthetic glycerine field this year. The revised expansion goal set for glycerine has not yet been totally accounted for, making glycerine perhaps the only chemical for which the govenrment's expansion goal has not been oversubscribed.

The market in crude natural glycerine was reported to have gained in strength recently although prices were nominally unchanged to date. Stocks of glycerine at the beginning of March this year totaled 55,817,000 pounds according to the Association of American Glycerine and Soap Producers compared to 54,744,000 pounds in stock on the first of February and 40,576,000 pounds at the beginning of March, 1955.

Production of glycerine (crude only) aggregated 22,887,000 pounds in March compared to 23,029,000 pounds in February and 19,278,000 pounds in March last year. The cumulative total of production including March for 1956 has been 69,201,000 pounds of crude compared to 53,051,000 pounds in the corresponding period in 1955.

Glycerine imports in March amounted to 1,683,000 pounds compared to 1,895,000 pounds in February and 1,403,000 pounds during March last year. The cumulative total of imports to date was 6,946,000 pounds compared to 5,854,000 pounds in the corresponding period in 1955. Exports in March this year amounted to 859,000 pounds compared to 579,000 pounds in February and 761,000 pounds in March, 1955. The cumulative total of exports this year was reported at 1,741,000 pounds compared to 2,270,000 pounds in the January-March period last year.

Glycerine stocks at the end of March amounted to 59,091,000 pounds compared to 55,817,000 pounds at the end of February and 40,898,000 pounds at the end of

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	May 20, 1955
130.93	130.93	131.02	130.45

For Current Prices see Page 9

Aliphatic Organics

March last year. Disappearance of glycerine totaled 20,437,000 pounds in March compared to 23,272,000 pounds during February and 19,599,000 pounds in March, 1955. Overall disappearance amounted to 67,292,000 pounds in the first quarter of 1956 compared to 19,599,000 pounds in the corresponding period last year. Consumption was, therefore, appreciably higher this year according to these figures.

Formaldehyde—There were no new developments in this market. Consumption continues to run at very good levels, indicative of the high level of productivity in the country, while supplies remain ample to accommodate trade requirements. The estimated productive capacity for formaldehyde by the end of 1956 is expected to increase almost 600,000,000 pounds.

Pentaerythritol manufacture has been accounting for a substantial amount of the formaldehyde captively consumed as well as its important uses in the manufacture of adhesives and resins. Pricewise, the market is firm in the face of steadily rising costs of manufacture.

Methanol—The market was steady last week. Consumption continues at a high level and seemed destined to hit a new high this year. The considerable emphasis placed upon the guided missile and rocket programs in addition to needs of the air force were expected to account for an even greater percentage of the methanol used as fuel this year, although any accurate appraisal was conjectural in view of the security blackout on such details.

Some imports of natural and synthetic methanol last year amounted to 10,710,000 pounds compared to 12,000 pounds in 1954. Exports totaled 38,062,000 pounds compared to 50,860,000 pounds in 1954.

Propylene Glycol—This item continues to move at a routinely good rate. The number and uses of propylene glycol are so diversified as to preclude any notable dips or rises in consumption, it was said. Supplies are ample to meet trade requirements and were expected to continue. Prices were firm.

Thrichloroethylene—Demand for this chlorinated solvent was reported to be running at a good rate. Consumption of this chemical for degreasing operations accounts for an appreciable amount of the overall amount consumed. Supplies were adequate to accommodate consumer needs and expected to continue.

Inmports of trichloroethylene during January amounted 2,963,000 pounds while the cumulative total of imports in 1955 was 20,190,000 pounds compared to 23,786,000 pounds in the preceding year.

Vinyl Acetate—While there was an adequate supply of this monomer available to meet the needs of the paint industry in particular, and certain other end-use patterns in general, it was only because of the very considerable expansion of productive sources, that this was so. Demand and use had grown sharply in 1955, and was expected to continue on the upgrade in 1956. Prices held firmly to schedules which have prevailed over recent months.

A newer vinyl monomer, vinyl propionate, was now commercially available. What its market potential would be, and how much it might or might not gain at the expense of vinyl acetate was at this point a matter of pure conjecture.

USDA 1957 Allotment Sets All-Time Record

A record-breaking appropriation of $1,983,512,568 for the Department of Agriculture for fiscal year 1957 was passed by the house last week and sent to the senate. The amount was $3,789,700 below the budget request.

The bill appropriated $783,061,708 for the regular functions of the department, $929,287,178 for corporate expenses and $271,163,672 for special programs. The Agricultural Research Administration received $49,972,000 of the total, an increase of $10,816,845 over the current year's appropriation. The bill allotted $22,594,000 for plant, animal and pest control, or $2,413,300 more than this year.

Tolerance Date Extended

The effective date when tolerances must be established for residues of ammonia on citrus crops has been extended until July 22, 1956, by an order of the Food and Drug Administration published last week. The order explained that it involved the nonseasonal use of the chemical.

Archer-Daniels Announces Executive Staff Changes

The appointment of Erwin A. Olson as administrative vice-president, election of Richard G. Brierley as vice-president, and a change in the responsibilities of John H. Daniels and Daniel A. Copenhaver have been announced by Archer-Daniels-Midland Company, Minneapolis, Minn.

Mr. Olson, a vice-president, was named to fill the newly created position of administrative vice-president. In his new position he will direct many of the company's staff functions.

Richard G. Brierley, newly elected vice-president, succeeds Mr. Olson as manager of the company's W. J. Small Division. Mr. Brierley, previously an assistant vice-president, has been in charge of production and procurement for this division since January, 1952.

John Daniels, assistant vice-president and sales manager for linseed oil sales, will move to Kansas City, Mo., to succeed Mr. Brierley. Daniel A. Copenhaver, in charge of the company's marine oil sales since October, 1953, will also head up ADM's linseed oil sales.

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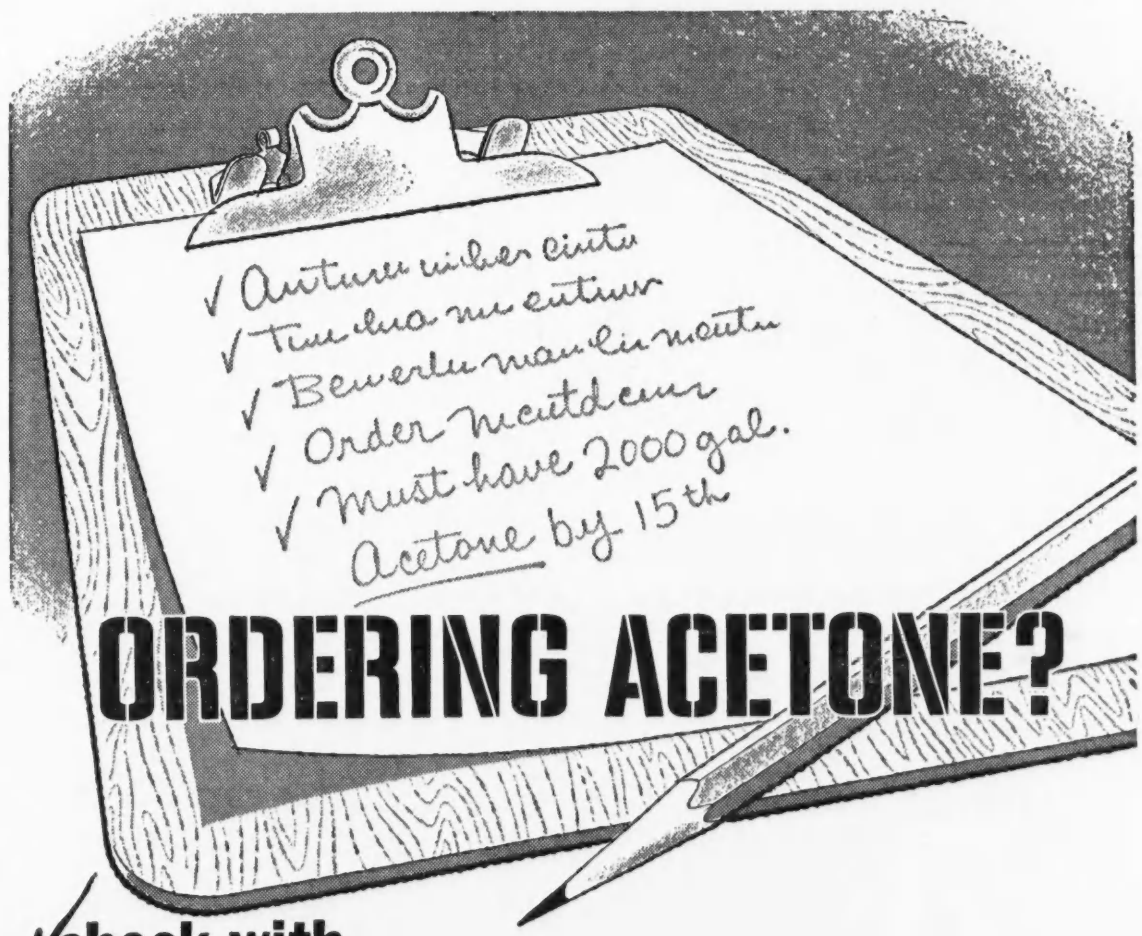

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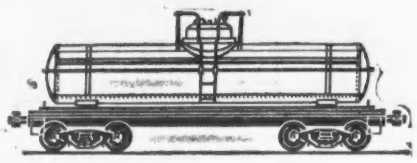

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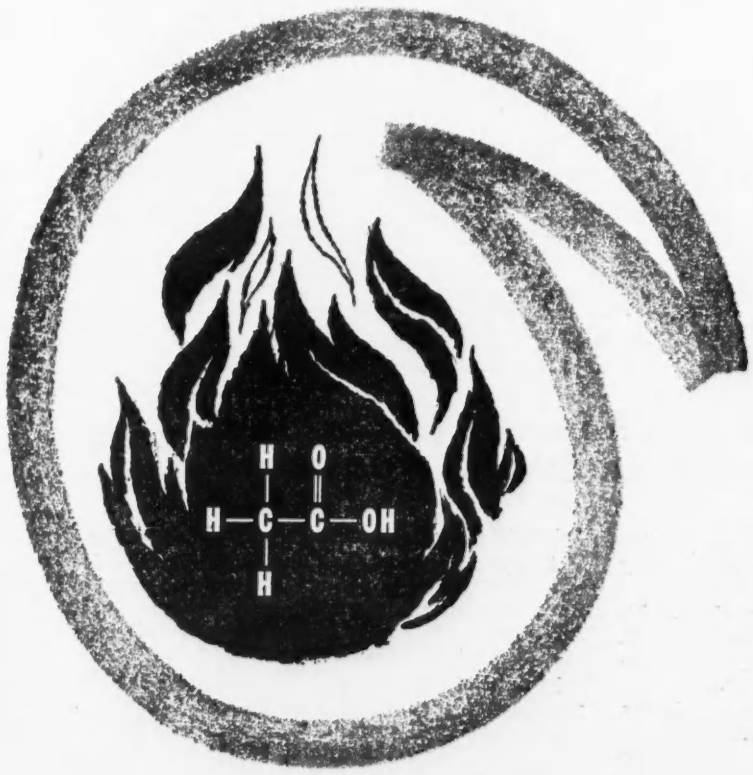

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Obituaries

Norman J. Burd

Norman J. Burd, vice-president and director of manufacturing for Norwich Pharmacal Company, Norwich, N. Y., died May 11 in Ft. Lauderdale, Fla. He was forty-six years old.

Mr. Burd joined Norwich in 1945. He was named director of manufacturing and elected a vice-president in 1952.

Dr. Joseph S. Friedman

Dr. Joseph S. Friedman, writer, lecturer and chemist, formerly with Ansco Company, at Binghamton, N. Y., died May 10 in that city. He was fifty-seven years old. Dr. Friedman wrote two books and numerous magazine articles on color photography.

Clarence P. Seaverns

Clarence P. Seaverns, president of Howe & French, Inc., Boston, Mass., and widely regarded as dean of the New England chemical industry, died May 13 in Boston. He was eigthy-four years of age.

Mr. Seaverns joined Howe & French, a manufacturer of nitrocellulose products and distributor of industrial chemicals and laboratory supplies, in 1890.

He left the company in 1901 to form his own concern, C. P. Seaverns Company, and returned to Howe & French three years later as president, a post he held until his death.

Among his chemical developments, Mr. Seaverns early in his career worked out formulas for a number of nitrocellulose adhesives, some of which are still being sold today.

Active in a number of chemical industry organizations, he was a member of the Chemical Club of New England, the New England Paint, Varnish and Lacquer Association and the Boston Rubber Group. He was also a member of the Boston Chamber of Commerce.

Dr. Carl Berg, a founder, vice-president and chief engineer of Nickel Cadmium Storage Battery Corporation, Easthampton, Mass., died May 16 in Northhampton, Mass. He was fifty-nine years old.

Levan R. Fleck, manager of safety for Ethyl Corporation, New York, died May 12 in Wallingford, Vt. He was forty-six years old.

Mrs. Harriet Wallace McNulty, wife of James H. McNulty, president of Pratt & Lambert, Inc., Buffalo, N. Y., and a member of the board of the company for twenty-three years, died May 10 in that city. She was eighty years old.

Clifton Rogers, a vice-president and general sales manager of New York Rubber Company, New York, died May 13 in White Plains, N. Y. He was sixty-nine years old.

Plant Food Group

—Continued from page 7

nual "Soil Builders Award for Editors" winners, by Louis W. Wilson, secretary and director of information of the institute.

A time-lapse film presentation on "Seeing Plants Feed" by John Ott, of John Ott Pictures, Inc., Winnetka, Ill., a national authority on time-lapse photography.

Sen. Fulbright will speak on "Our Nation's Role in World Tension."

The institute's annual business meeting also will be held on June 12, preceded by a memorial resolution presented by Hugo Riemer, chairman of the memorial committee.

The institute's board of directors will hold a breakfast meeting on June 13.

A hospitality hour, courtesy of the nitrogen producers, will be held in the evening of June 11.

The annual banquet of the institute will be held on June 12, preceded by a hospitality hour, courtesy of the potash producers.

Northern Chemical Makes Fangmeyer Sales Manager

Northern Chemical Industries, Baltimore, Md., has appointed Donald T. Fangmeyer as general sales manager. Since 1949, he has held various sales positions with Olin-Mathieson Chemical Company, the latest of which was manager of the wholesale sales of Olin's eastern fertilizer division.

Since 1950, he has been active in the sale of Anhydrous Ammonia for both direct application and fertilizer mixing.

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Chemical Industry Urged to Focus

—*Continued from page 3*

fireproof and trustworthy plastic pipe in a competitive price range for shipboard use."

The Swift spokesman, speaking of plastic films, cited the need for a preservative that might be applied to foods through dipping.

Speaking of the need for better fuels and lubricants, Eric H. Reichl, director of research and development for Pittsburgh Consolidated Coal Company, said, "We need more specific knowledge of the composition of coal so we can more efficiently convert it into liquid and gaseous fuels and chemicals."

Representatives of the auto industry told the duPont surveyors that the industry needed large quantities of high octane gasoline available at reasonable prices. This would enable them, they said, to boost still further the compression ratio of car engines. They also spoke of the development of an "economy grade diesel fuel of uniform quality."

Jet fuel was also named as an area needing further study. Esso Research & Engineering Company cited the necessity of jet fuels that will remain stable at the temperatures generated in supersonic aircraft. They also spoke of synthetic lubricants that will operate in a jet at temperatures from 65 degrees Fahrenheit to more than 450 degrees.

A refrigeration manufacturer cited the need for high and low temperature lubricants for their equipment. They said that in many cases no satisfactory lubricant is available for refrigeration equipment operating at 100 degrees Fahrenheit.

Randolph Stenerson, director of Carrier Corporation's materials and processes department, noted that a major air conditioning problem is "a practical, economical means of controling odors. Underlying the problem," he said, "is the need for a better understanding of the chemistry of odor control."

A spokesman for the aromatic chemicals field talked to the duPont surveyers about the need for new horizons. "The development of synthetic flavors has been confined largely to imitating natural flavors," he said. "There are unlimited opportunities for the imaginative and talented chemist to create new flavoring materials and to give us flavors different from any which we now know."

What Construction Industry Wants

More permanent materials were cited as the major chemical needs of the construction industry. A spokesman said, "We are not satisfied with a life of five years, but must insist on twenty-five fifty or 100 years. Adhesive bonds, plastic cores or porcelain finishes in a metal curtain wall must last as long as brick, mortar and stone.

"Selection of the right material for the application is the biggest job to be done. More data on the physical and chemical properties of materials should be made available to potential users."

Spokesmen for the meat food industry named two areas in which chemistry should help them. The director of research for Armour & Co., Victor Conquest, named them as new uses for meat byproducts and improved processing and handling of meats. Better methods of controling spoilage, preventing discoloration, loss or change of flavor and other problems keyed to aging were also considered of major import to the industry.

Textile industry spokesmen talked of a non-woven synthetic fabric that contained all of the properties of woven cloth.

Earl Heard, vice-president in charge of research for West Point Manufacturing Company, said, "Our past thinking about fibers has been confined to carding and spinning to produce yarn for weaving. Today the fastest growing thing in textiles is non-woven fabrics. Its full potential will not be realized until the chemical industry can supply products that will bond fibers into a fabric that has all the desirable cloth-like properties of a woven fabric."

Another textile industry leader in research spoke of the need for "a method of improving the quality of wool grease recovered from the neutral scouring process, a satisfactory continuous piece-dyeing process for wool and a more durable water repellent for woolen fabrics."

House Unit Keeps

—*Continued from page 3*

endorse or reject legislation is to be brought before the house for a vote. There was no indication from Chairman Emanuel Celler of New York when he would lay the matter before the full committee.

The subcommittee had been under heavy pressure from small business interests to release control of the bill ever since the decision of the Seventh Circuit Court of Appeals several weeks ago again favoring Standard Oil Company of Indiana in its controversy with the Federal Trade Commission over use of the "good faith" clause to defend price discrimination in the Detroit area.

During public hearings before the subcommittee, small business representatives in the food, petroleum and automotive parts distributive fields supported the bill while the Department of Justice and FTC opposed it.

Zirconium Capacity

—*Continued from page 3*

could also be produced in this equipment, by the same basic U.S.I. process.

Another project for the unit is large-scale trial of a U.S.I.-developed process for recovery of reactor-grade zirconium from hafnium-free scrap. This recovery process, already successful in the laboratory, is expected to convert zirconium scrap into sponge on a toll arrangement for about half the cost of virgin sponge. This is important since only 30 percent of zirconium sponge is obtained in fabricated form due to losses during the metallurgical and fabrication steps.

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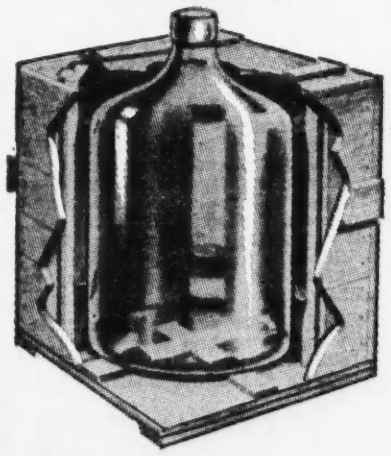

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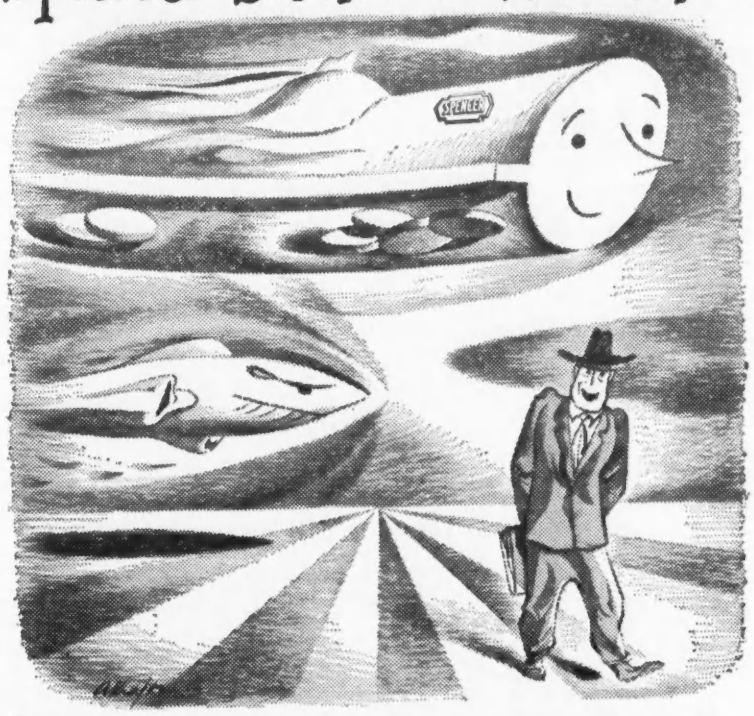

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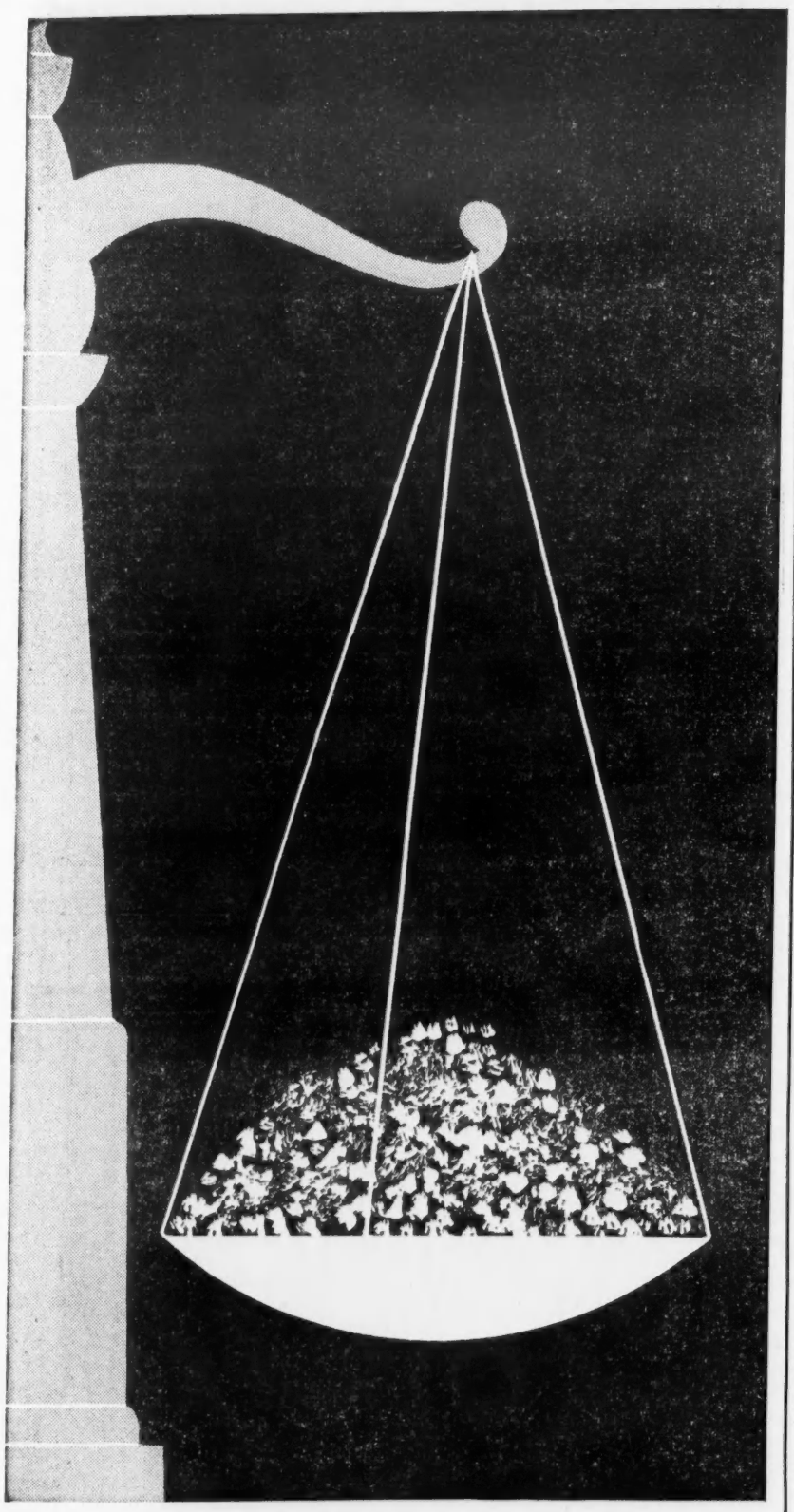

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Allied Chemical

Coal Chemicals

Speculative influences were mingling with basic conditions to complicate the behavior of the market last week. Some rather frenzied buying in benzol was attributed to fear of a steel strike, which, in turn, was promoted by rumblings coming out of the preliminary meeting of steel labor leaders in Pittsburgh. Additional gloomy news from the automotive industry was giving pause to consumers of certain other chemicals. Finally, there was speculation, both bullish and bearish, in response to the numerous additional announcements of ambitious industrial expansion programs.

Phenol was seen to be in a particularly vulnerable position if a steel strike should come. There was ample reserve of production facilities. But benzol, tight even in normal circumstances, would be extremely difficult to get if cokeoven output were interrupted.

O-cresol was further improved, possibly due in large part to the heavy trade in insecticides and herbicides. Demand for all cresols was very strong.

Low-boiling cresylic acids were tight. The import market offered very little ADF material at the listed price. There was abundant acid in the middle-boiling ranges at the docks, material rich in xylenols and poor in meta-para content. There was no market for it.

Phthalic anhydride has eased in recent months, but producers noted a little improvement in April over March, forecast May would be as good as April and maybe a shade better.

Naphthalene was in ample supply but still dependent on considerable imported material and the high current yields from the cokeovens of the steel industry.

Di-tertiary-butyl-p-cresol was still improving and now constituted a rather substantial item volumewise.

Styrene monomer continued to move well.

The American Iron and Steel Institute estimated steel production in the week ended May 20 would amount to 95.7 percent of theoretical production, equivalent to 2,355,000 tons of steel. The figure was compared to output of 2,343,000 tons in the week previous, 2,466,000 tons in the comparable week in April and 2,338,000 tons in the corresponding week a year ago..

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	May 20, 1955
115.01	115.01	115.01	114.68

For Current Prices se · Page 9

Basic Products

Benzol—Increased buying interest was reported in this market, which had already been very tight.

Much of the material sold was being set aside against the possibility of a general steel strike. This possibility, in turn, was regarded with growing reverence as policy-making company officials studied preliminary statements issued by labor spokesmen in Pittsburgh. Labor was determined to make demands, it appeared to them, that were certain to meet obstinate resistance from steel management.

Another evil omen was the declining price of steel scrap. Demand for finished steel was never higher in peace time, yet the steel companies were providing relatively feeble demand for scrap. Observers said this phenomenon could only mean that steel management was reducing raw material inventories in event that the industry would be shut down.

Particularly vulnerable among the consuming industries was manufacture of synthetic phenol, which was dependent on a continuous supply of benzol in heavy volume.

In light of these conditions, the industry was taking lightly the fact that Bolivia had slapped a 1,000 percent currency devaluation surcharge on imports of benzol.

Cresols—Ortho continued to improve and was now described as tight in some areas. Reasons for the complete form reversal of the past few months were not altogether clear. One explanation constituted a parallel to a development in Europe, where seasonal strong demand for herbicides and insecticides has recently tightened up supplies of ortho. The herbicides and pesticides have been particularly strong in this country lately.

Meantime, without parallel in this country, European demand for meta-para fractions has softened.

Naphthalene—The market was a bit soft. Producers of phthalic anhydride had built up all the inventory they wanted. In one instance, an importer was asked to postpone delivery of naphthalene brought in under contract.

Meantime, European demand for naphthalene was brisk. The spot market in imports at US ports was described as dead.

Producers said that at least some of the lack of interest must be attributed to digestion of heavy stocks of phthalic anhydride accumulated a few months ago when supply was uncertain. Reduced consumption of phthalic by the automotive industry was a significant market factor.

In the long run, consumers of naphthalene were still depending in part on imports, future availability of which was considered doubtful, along with record high yields of cokeoven material in the steel industry Continuous supply in the latter instance depended on preservation of the labor peace when the steel companies negotiate next month with the union.

Phenol—The market remained moderately strong.

Benzol for use in manufacture of synthetic phenol was especially hard to come by. Consumers, eager to store up in event of a steel shutdown, were being treated on a basis of allocations. There was excess of phenol production plant facilities to fall back on, should the need arise, but availability of enough benzol appeared unlikely.

Toluol—There was more bearish news from the automobile makers last week. Heretofore, such news has been felt acutely in the toluol market, and pro-

Cokeoven Output: March

Following are cokeoven production statistics comparing March 1956 and the same month in 1955 as reported by the Bureau of Mines. Only cokeoven output is represented. (Creosote content of creosote-coaltar solutions was not calculated prior to January 1956.)

	March 1956	*March* 1955	*1st Quarter* 1956
Benzol (excluding motor grade).....gals.	16,722,340	14,860,264	49,007,703
Creosote oil:—			
Creosote-coal tar solution.....gals.	251,572	820,551	847,616
Content in solution.....gals.	202,915	.....	683,914
100 percent straight distillate.....gals.	2,122,722	2,121,671	5,450,997
Total 100 percent creosote.....gals.	2,325,637	.....	6,134,911
Crude coaltar.....gals.	77,434,286	71,498,047	225,752,827
Naphthalene, crude:—			
Solidifying under 74° C.....lbs.	4,107,125	4,731,741	10,825,058
At 74° C and under 79° C.....lbs.	12,896,481	11,306,013	38,054,105
Total .....lbs.	17,003,606	16,037,754	48,879,163
Pyridine, crude (dry basis).....gals.	23,002	19,801	77,193
Solvent naphtha, refined.....gals.	14,786	24,851	48,131
Toluol, 1° and 2° grades only.....gals.	3,545,273	3,264,907	10,035,956
Xylol .....gals.	1,058,783	987,762	2,864,386

Coal Chemicals

ducers took a jaundiced view of this latest development.

Inventories at producers' plants, long troublesome, continued to swell.

Xylol—Lively demand from makers of pesticides and weed killers, augmenting the very strong resins demand, kept the bidding for xylol on a competitive basis.

Supply was short everywhere.

Intermediates

Di-tertiary-butyl-p-cresol—Increased consumption as an anti-oxidant for animal feeds was toning up this trade. The chief outlet, as an anti-oxidant in gasoline, usually with tricresyl phosphate, was still generating heavy demand. Sales volume of this intermediate has grown to a substantial figure.

Phthalic Anhydride—Demand was still far below that of last autumn and producers' stocks had grown to moderate dimensions.

The decline in trade noted in the early months of the year had apparently levelled off toward the end of March, however. Somewhat improved tone was reported in April, as compared to that of March, and early indications were that May would be as good as April, perhaps a little better. There were some orders last week for quick delivery.

The phthalic price structure remained strong. When naphthalene was increased last autumn, phthalic quotations were held down to where they had been. This left an extra measure of resilience in phthalic prices.

It was pointed out that growth of inventories had taken place only with uncurtailed production.

Styrene Monomer—Consumption for use in the manufacture of tires was off somewhat, but the firm tone by way of other outlets maintained a very strong market for styrene. Demand for polystyrene was still heavy in the face of strong competition from polyethylene.

The big export market was still growing, both for polystyrene and for raw material styrene monomer. A case in point was a company in India, which recently contracted to buy raw material in this country for operations at a plant designed to turn out 6 million pounds of molding powders and 1.2 million pounds of modified polymer per year. Consumption of polystyrene in India rose from less than 2 million pounds in 1948 to about 5 million pounds in 1954.

Coal Chemicals

Estimated output of coal chemicals recovered from cokeoven operations during the week ending May 20 was as follows:—

Ammonia liquor	lbs.	916,764
Ammonium sulfate	lbs.	39,036,390
Benzol	gals.	3,489,617
Coaltar	gals.	17,152,353
Creosote oil	gals.	665,393
Naphthalene, crude	lbs.	3,711,414
Pyridine, refined	lbs.	13,308
Toluol	gals.	768,899
Xylol	gals.	221,798

Monsanto Research Post Assigned to Rob't Lenz

Robert E. Lenz is the new assistant director of the chemical research department of Monsanto Chemical Company's research and engineering division.

Mr. Lenz, who has been special project manager for the division, will be headquartered at Dayton, Ohio, where he will direct the engineering research section of the department, reporting to Dr. Earl W. Gluesenkamp, department director.

The engineering research section previously reported to the engineering department of the research and engineering division. Monsanto said that the organizational change will integrate more effectively all phases of the division's research and engineering activities.

Escambia Names Wohlwend

The appointment of Mr. A. N. Wohlwend as director of commercial development for Escambia Bay Chemical Corporation, Cambridge, Mass., has been announced. Prior to this appointment, Mr. Wohlwend was associated with Stauffer Chemical Company in a similar capacity.

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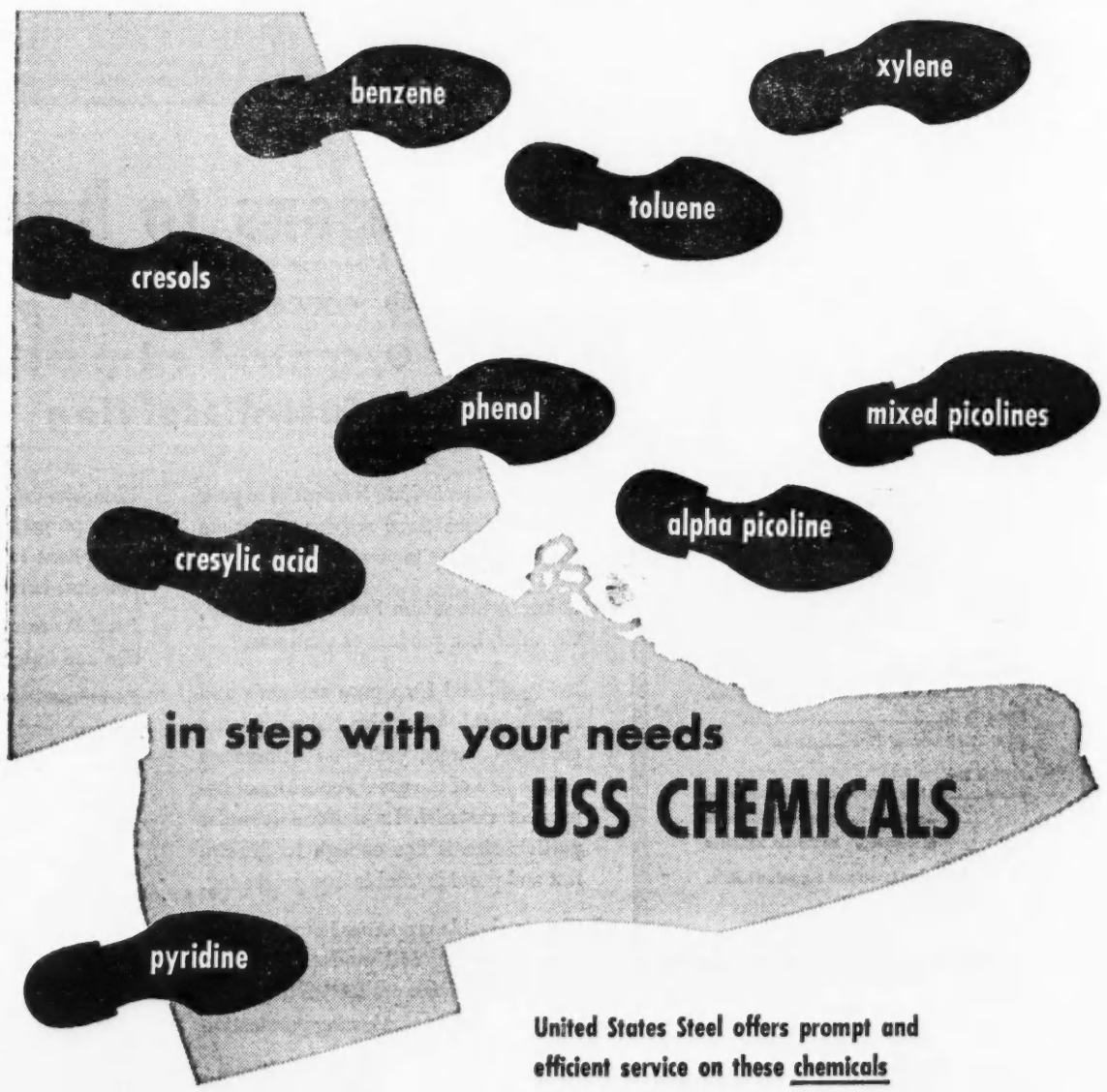

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Heavy Metals (as Pb)	0.001	% Max.
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Drugs, Fine Chemicals

There were no price changes reported in this market last week. Inquiry for a number of seasonal items has been acceleratd by the final arrival of warm weather. Whether overall demand for a number of seasonal items will be curtailed this year as a result of the late start was a matter for conjecture at this time since the state of the weather to come should be a decisive factor in influencing consumer demand, particularly in soft drinks, and various cosmetic preparations.

The lanolin market, while enjoying good seasonal inquiry, was reported to be very competitive. Stock of imported and domestic lanolin were more than adequate to accommodate consumer needs and prices were correspondingly on the weak side, it was said. The tartrates were reported to be holding up quite well with market prices on the acid and cream of tartar very firm in the face of a strong market at origin. The severe winter in Europe last year was reported to have damaged the grape arbors to some extent and the resultant decline in wine output will probably affect the production of argols, which are the crude material from which tartrates are processed.

The commodities market registered a seasonal impetus in the call for camphor, principally tablets which had been held back several weeks as a result of the late spring. Camphor tablets remain in the favor of many consumers as a moth-preventative despite appreciable competition from naphthalene and paradichlorobenzene. Natural menthol continues slow, on the whole. Buying has been hand-to-mouth and supplies ample to accommodate consumers' requirements. Prices were unchanged.

Camphor—Demand for synthetic camphor was reported to be running at a good rate. Inquiry was centered mainly on camphor tablets in view of the late spring which has set back sales on the consumer level several weeks. Prices were firm and expected to hold unchanged while supplies were reported ample to cover anticipated requirements.

Lanolin—Demand for lanolin was reported at a steady rate. Supplies were ample to accommodate trade requirements and were expected to continue in the future. Competition among producers was said to be intensive. Supplies of degras, the crude material from which lanolin is extracted are plentiful with imported material bolstering domestic supplies.

Current spot prices on lanolin ranged from 23c. to 25c. on material meeting the standards for USP hydrous lanolin while anhydrous lanolin was pegged at 24c. to 26c. and cosmetic grades anywhere from 26c. to 28c. per pound. The price spread indicated differences in quality and different sellers' ideas.

Takings by the pharmaceutical and cosmetic makers have been held back late arrival of spring although overall consumption of lanolin this year was expected to continue to increase in some directions, particularly in cosmetics and notions.

Menthol—The spot market remains unchanged. Prices were steady while inquiry was sporadic. There were some reports in the trade that inflationary trends in Brazil might result in higher costs to buyers in this country. Japanese menthol was reported to be holding at a price level substantially above Brazilian menthol.

Mercurials—The market in mercury derivatives continued quiet last week. Prices were firm and not expected to change in the immediate future. Supplies were adequate to accommodate consumer requirements.

Molasses—Feed molasses markets were unsettled during the week ending May 15, 1956, with a stronger tone. Prices for blackstrap advanced ½c. to 1c. per gallon at several terminals, and continued firm at all other points. Unsettled conditions were most evident at New Orleans, where prices were 1c4. to 14½c. per gallon. Some quotations were reported above and below this level and trading was light. The price spread at East coast points continued but most deliveries were being made at the lower price, having been booked in advance at that level. Blackstrap prices were $1 higher at Los Angeles, Stockton and Richmond, Calif., where demand has improved. A seasonal demand prevailed at most other points. Supplies of blackstrap were adequate at all terminals.

Molasses use in the manufacture of ethyl alcohol increased again during March, totaling 9,900,000 gallons. Stocks of alcohol decreased slightly in March and production was up 900,000 gallons.

Production of Cuban blackstrap totaled 178,400,000 gallons as of April 15, according to the Cuban Sugar Stabilization Institute. This compares with 166,700,000 gallons produced a year ago, when the yield of blackstrap per short ton of raw sugar was 39.9 gallons. On April 15, 1955, the yield was 37.9 gallons. Trade sources estimate final Cuban high-test molasses production will be about 115,000,000 gallons.

Sodium Benzoate—Demand for this salt was said to be seasonally active. Sodium benzoate in addition to its wide use in soft drink manufacture as well as various assorted food uses such as jams, jellies and the like, finds its largest food use as a preservative in margarine. The steady rise in margarine consumption has been paralleled by the boost in consumption of this salt for this application. Supplies were adequate to accommodate consumer requirements and expected to continue in the immediate future. Prices were steady.

Sulfonamides—Demand for the sulfa drugs group was unchanged. Supplies were adequate to meet inquiry and expected to continue.

According to data issued by the Tariff Commission, production of sulfa drugs in 1955 totaled 2,260,000 pounds a 46 percent decline from the output level of 1954, which amounted to 4,157,000 pounds. This sizable drop is the latest and most severe decline in sulfonamide production in recent years. Production has steadily declined since 1952, which was 10 percent, 1953, 19 percent and 1954, 11 percent from the preceding year's output.

Much of the decline over the years has been attributable primarily to the increased use of antibiotics, particularly broad spectrum types, in the treatment of a wide range of infections and diseases. There had been some upswing in the use of the sulfas in combination with the antibiotics when first introduced some time ago but it had not developed into the hoped-for uptrend in the uses of sulfas rather than antibiotics in many applications.

Total exports of sulfa drugs, bulk and dosage forms, was off 8 percent last year as compared with 1954 shipments. Of the aggregate, sulfadiazine exports accounted for some 285,000 pounds as compared with 271,000 pounds in 1954, which was about 36 percent of the total amount exported. Shipments of next importance were those of sulfathiazole, which aggregated 203,000 pounds compared to 235,000 pounds in 1954. Countries receiving major shipments of sulfonamides were Mexico, Canada, India, Philippine Republic, Venezuela and Columbia.

Vitamin B_{12}—The consumption and use of vitamin B_{12} materials has undergone a steady growth since it first appeared on the market, and reached a fair level during 1955. Price stability, after a series of reductions in its early stages of marketing as production economies from larger volume was passed on to consumers, has characterized the market. During 1955 there were no price changes, and these price levels carried over into this year.

The pure crystalline material is available in 1 or 5 gram vials at $245 per gram, while the oral grade was priced at $185 per gram. The oral grade is listed in NF, 10th edition as cobalamin concentrate.

While the NF specifies that the concentrate shall contain not less than 50 micrograms of cobalamin activity per gram, the product is currently marketed by some sources at a concentration of 3,000 micrograms of cobalamin per gram. The price of $185 per gram refers to the contained cobalamin, not the mixed cobalamin and diluents, and is paid for on that basis.

Zinc Oxide—Demand for USP zinc ox-

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	May 20, 1955
65.84	65.84	65.84	67.18

For Current Prices see Page 9

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Drugs, Fine Chemicals

ide was reported to be running at a brisk seasonal level. Supplies were ample to meet consumer requirements and expected to continue. Prices were firm. A heavy seasonal usage of zinc oxide is in the manufacture of calamine lotion which is considered an old stand-by remedy for poison ivy and similar skin rashes.

Botanicals

Trading continued at routine levels in the spot market last week. Supplies of all but a few botanicals were ample to meet consumer call. Major interest was centered in the new crop which has been delayed considerably as a result of the exceptionally late spring this year. In regards to the inventory positions of mandrake root, colchicum seed, gentian root and lobelia herb, these items were scarce.

The outlook with regard to an adequate labor supply this year appears healthy, on the whole, in view of the gradual but inevitable displacement of an ever increasing number of natural drug materials by synthetics. Overall collection of botanicals should be somewhat smaller this year as a result.

The market in imported botanicals was largely unchanged. Licorice root stocks were believed ample to carryover trade needs until the next crop season which will start in mid-summer. Ergot was in slow demand while inquiry for papain was also sporadic. Stocks of these items were adequate to accommodate current and anticipated trade requirements, it was noted. Nutgalls remain in tight supply and the continuing tension in the Middle East has been very disquieting to tannic acid producers who depend upon Syria for their nutgalls supply.

Balsams—The spot market was steady last week. The Bureau of the Census reported that imports of copaiba balsam amounted to 11,000 pounds in January, 1956, with an estimated value of $6,000 while imports of balsam tolu totaled 8,000 pounds, valued at $25,000.

Overall imports of copaiba balsam aggregated 65,000 pounds in 1955 with a value of $38,000 compared to 147,000 pounds in 1954, valued at $78,000. Imports of balsam tolu last year were 32,000 pounds valued at $90,000 while compared to 36,000 pounds brought in the preceding year at the same estimated value.

Gums—The spot market was reported to be on the quiet side insofar as trading is concerned. There has been some notable strengthening in the price of locust bean gum since last reported as a result of higher prices at origin. Gum tragacanth has also firmed up. Locust bean gum was reported selling at around 40c, on spot while gum tragacanth was pegged at $3.50 to $4.00 for No. 1 ribbons; $3.00 to $3.20 on No. 2 and $2.50 to $2.65 of No. 3 grade gum.

According to data supplied by the Bureau of the Census, imports of four major water-soluble gums were substantially greater last year than the volume of receipts in 1954.

Gum arabic, for example, registered a gain of nearly 13 percent, making 1955 the highest import year in the 1951-55 period. Similarly, tragacanth went ahead by more than 35 percent, posting last year as the second highest since 1950. Karaya and locust bean gum imports in 1955 were 20 and 28 percent greater, respectively, than in 1954. In the case of locust bean gum, 1955 imports were more than 20 percent higher than receipts for any preceding year in the 1950-54 period.

It would appear that the imported water-soluble gums are regaining a good part of their previous usage despite competition from domestically produced gum guar and sodium carboxymethylcellulose, both of which are substitutes for the water-soluble gums. Currently, the guar plant is employed in the Southwest principally as soil cover and secondarily as fresh fertilizer and, when cut, as animal fodder. Some sources believe that it is not economically profitable to allow the plant to go to seed. If smaller seed yields are obtained, domestic gum output and imports are accordingly affected. However, rapidly growing requirements currently appear to leave room for both the growth of domestic production and increased volume in water-soluble gum imports.

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Phillips Gives German Firm Rights to Polyolefin Process

Phillips Petroleum Company, Bartlesville, Okla., has licensed Badische Anilin und Soda Fabrik (BASF), of Ludwigshafen on Rhine, Germany, to use the new Phillips-developed catalytic process for making polyethylene and other polyolefin plastics.

The agreement gives BASF exclusive use in Germany of Phillips patents and technical knowledge for producing this new family of polyolefins.

Phillips has licensed its polyolefin process to four major United States chemical companies and six leading overseas firms in as many countries, and is itself constructing a 110 million-pound-a-year plant to produce the new polyethylene at its Adams Terminal chemical manufacturing site on the Houston (Tex.) Ship Channel.

Merck Buenos Aires Plant To Be Opened Next Month

Merck & Co., Rahway, N. J., has announced that it will start operations next month in its new Buenos Aires, Argentina, plant. The plant, which will employ about a hundred people, is designed to manufacture a line of cortisone and related steroid drugs.

Production will start as soon as certain raw materials are imported under an exchange allocation granted last fall by the Argentine authorities. The corresponding import permits are being processed by these authorities to enable the importation of these essential basic materials.

DCAT to Hold Meetng

J. J. Toohy, general manager of E. R. Squibb & Sons, a division of Olin Mathieson Chemical Corporation, New York, will moderate a panel discussion at the second annual panel discussion and luncheon meeting of the Drug, Chemical and Allied Trades Section of the New York Board of Trade, at the Biltmore hotel, New York, June 26.

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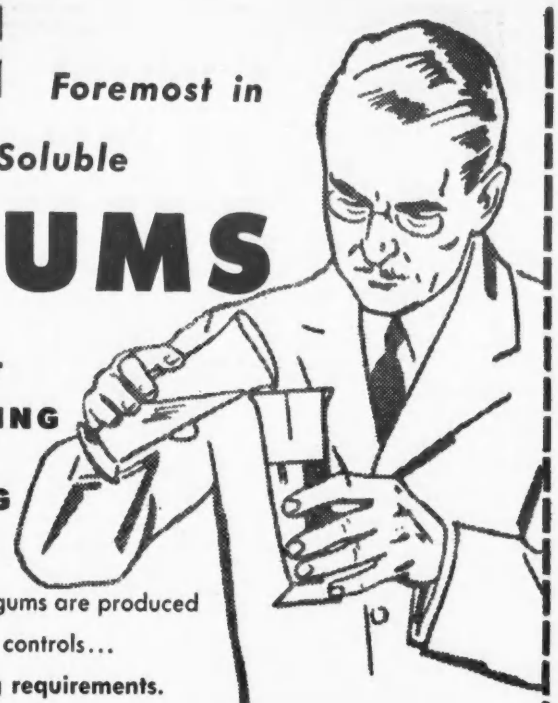

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AGAR—54 bls, Cosmic Industrial Corp, Kobe
200 bls, Mallet & Co, Nagoya
40 bbls, Uni Gum Corp, Casablanca
100 bbls, Meer Corp, La Coruna
16 bbls, Guaranty Trust Co, Valencia
ALUMINUM POWDER—7 dms, B F Drakenfeld & Co, Bremen
3-AMINO-1,2,4-TRIAZOLE—117 dms, American Chemical Paint Co, Antwerp
AMMONIUM BICARBONATE—50 dms, Chemical Manufacturing Co, London
100 dms, Chemical Manufacturing Co, Liverpool
CHLORIDE—200 bgs, Chemical Manufacturing Co, Liverpool
AMYRIS OIL—1 dm, John D Walsh Co, Port au Prince
ANILINE DYES—10 dms, Heemsoth Kerner, Liverpool
39 dms, Geigy Chemical Corp, Havre
28 dms, Ciba Co, Rotterdam
13 dms, Carbic Color & Chemical Co, Rotterdam
4 cans, Hensel Bruckmann & Lorbacher, Bremen
40 dms, Sandoz Chemical Works, Havre
4 cks, Van Oppen & Co, Havre
72 dms, Hensel Bruckmann & Lorbacher, Hamburg
100 cans, C A Haynes, Hamburg
ANNATTO SEED—64 bgs, L E Ransom & Co, Visakhapatnam
64 bgs, J I Demick, Visakhapatham
64 bgs, Marcel Calvet, Vizagapatam
ANTIMONY OXIDE—100 bgs, European Chemical Co, Hamburg
ARABIC GUM—254 bgs, Bank of N Y, Port Sudan
250 bgs, Meer Corp, Port Sudan
450 bgs, Morningstar Nicol, Port Sudan
300 bgs, Thurston & Braidich, Port Sudan
550 bgs, P A Dunkel, Port Sudan
500 bgs, Henry Heide Inc, Port Sudan
250 bgs, Irving Trust Co, Port Sudan
ARSENIC WHITE—70 bbls, American Smelting & Refining Co, Tampico
ASCORBIC ACID—10 cs, American Roland Ltd, Kobe
8 dms, Mitsubishi Intern Corp, Yokohama
6 dms, Yokohama
BARBASCO ROOT—186 bls, Irving Trust Co, Callao
BEESWAX—14 bgs, Machado & Co, Puerto Plata
50 bgs, Lenape Trading Co, Puerto Plata
24 bgs, Curacao Trading Co, Ciudad Trujillo
25 bgs, Lenape Trading Co, Ciudad Trujillo
67 bgs, E Vadillo Ruiz, Santiago
25 bgs, Lenape Trading Co, Santiago
20 bgs, C E Hamann, Buenos Aires
25 bgs, Marcel Calvet, Tampico
100 bgs, Buenos Aires
165 bgs, Tampico
BENZOIN GUM—9 bdls, Norwalk Mills, Singapore
BENZOL—10,135 tons, Dow Chemical Co, Batum
BERGAMOT OIL—12 hf cs, Dodge & Olcott, Messina
10 hf cs, Fleuroma Inc, Messina
44 hf cs, Citrus & Allied Essential Oils, Messina
24 hlf cs, Messina
BLANC FIXE—600 bgs, Naftone Inc, Antwerp
800 bgs, C J Osborn Co, Rotterdam
BLEACHING POWDER—75 dms, Chemical Manufacturing Co, Liverpool
CAMPHOR POWDER—200 cs, P H Petry, Keelung
500 cs, Lo Curto & Funk, Keelung
CANAGRIA ROOT—41 bgs, F D Keller & Son, Vera Cruz
CANANGA OIL—30 cs, Lo Curto & Funk, Penang
CANDELILLA WAX—896 bgs, Tampico
CARAWAY SEED—200 bgs, Louis Furth, Rotterdam
CARBAZOL—7 bbls, Hensel Bruckmann & Lorbacher, Rotterdam
CARBON TETRACHLORIDE—1 bbl, Atlantic Raw Materials, Hamburg
CARDAMOM—53 cs, Karl H Landes & E Balint, Mangalore
SEED—10 cs, Wm E Martin, Puerto Barrios
CARNAUBA WAX—150 bgs, Wm Diehl & Co, Parnahiba
522 bgs, River Plate Corp, Parnahiba
625 bgs, F Henjes, Parnahiba
313 bgs, Cornelius Wax Refining, Parnahiba
125 bgs, Biddle Sawyer Corp, Parnahiba
125 bgs, Frank B Ross, Parnahiba
63 bgs, Balfour Guthrie, Parnahiba
CASCARILLA BARK—8 bls, Meer Corp, Nassau
QUILLS—18 bgs, F D Keller & Son, Nassau
16 bls, Murbas Trading Co, Nassau
11 bgs, Murkas Trading Co, Nassau
CASEIN—1,000 bgs, P A Dunkel, Buenos Aires
3,600 bgs, Tupman Thurlow, Buenos Aires
668 bgs, Crawford Kish Co, Bordeaux
215 bgs, F H Paul & Stein Bros, Oslo
1,300 bgs, Guaranty Trust Co, Buenos Aires
1,000 bgs, Overseas Merchants Corp, Hamburg
CASHEWNUT SHELL LIQUID—95 tons, Irvington Varnish & Insulator Co, Cochin
CASSIA—5 bls, M J Golombeck, Halifax,
1,528 pkgs, Rotterdam
CASTOR BEANS—5,079 bgs, Baker Castor Oil Co, Salvador
OIL—298 tons, Woodward & Dickerson, Rotterdam
200 tons, Woodward & Dickerson, Salvador
CEDRAT OIL—4 hf cs, Cheramy Perfumery, Messina
CELERY SEED—170 bgs, Louis Furth, Bombay
36 bgs, Levy & Levis Co, Bombay
35 bgs, Otto Gerdau, Bombay
54 bgs, R T French, Marseille
20 bgs, A G Dunn, Marseille
CHESTNUT EXTRACT—1,669 bgs, Barkey Importing Co, Genoa
400 bgs, Bordeaux
CHLOROACETIC ACID, MONO—300 dms, International Selling Corp, Marseille
CINNAMON QUILLS—25 bls, V A Cordovi, Colombo
CITRONELLA OIL—10 dms, Borneo Sumatra Trading Co, Keelung
10 dms, United Global Corp, Keelung
6 dms, S B Penick & Co, Colombo
COALTAR DYES—4 bbls, Hensel Bruckmann & Lorbacher, Antwerp
1 dm, Carbic Color & Chemical Co, Rotterdam
5 dms, Hensel Bruckmann & Lorbacher, Rotterdam
14 dms, Baritan Dyestuff Corp, Pusan
COCHINEAL—52 bgs, Irving Trust Co, Cadiz
COCOA EXPELLER CAKE—417 bgs, Woodward & Dickerson, Salvador
834 bgs, Hollander Trading Corp, Salvador
COCONUT OIL—300 tons, E F Drew & Co, Cebu
300 tons, American Trust Co, Cebu
49 dms, Procter & Gamble Co, Manila
COD OIL—150 dms, Nopco Chemical Co, St Johns
100 dms, Ottol Oil Co, St Johns
25 dms, Bowring & Co, St Johns
CODLIVER OIL—5 dms, Eelsingh & Lugtigheid, Bergen
100 dms, Peder Devold Oil Co, Alesund
193 dms, Arista Oil Producers Co, Alesund
COLOCYNTH PULP—82 bls, Meer Corp, Port Sudan
COPAIBA BALSAM—33 dm, National City Bank, Manaus
COPAL GUM—25 bkts, D Hecht & Co, Macassar
165 bkts, S Winterbourne & Co, Macassar
CORIANDER OIL—3 cs, Magnus Mabee & Reynard, Trieste
CORN STARCH—672 bgs, Rotterdam
COTTON LINTERS—99 bls, Antwerp
CREAM OF TARTAR—500 bgs, Nylos Trading Co, Genoa
CRESYLIC ACID—75 dms, James E Fox, Liverpool
100 dms, Republic Chemical Corp, Liverpool
513 dms, H A Gogarty, Liverpool
CRUDE GUM—4,000 bgs, Stein Hall & Co, Karachi
CUTTLEFISH BONE—99cs, Hinton & Co, Kobe
70 cs, Hershey Co, Kobe
170 cs, Guaranty Trust Co, Lisbon
100 cs, Marseille
DEXTRIN—525 bgs, Guaranty Trust Co, Rotterdam
280 bgs, Rotterdam
DICALCIUM PHOSPHATE—400 bgs, Wessel Duval & Co, Antwerp
DIVI DIVI—940 seroons, H D Sheldon & Co, Puerto Plata
DUBOISIA LEAVES—94 bls, Karl B Rosen, Brisbane
EARTH COLORS—145 bgs, Naftone Inc, Rotterdam
200 bgs, Antwerp
FERRIC SULFATE—110 dms, Hudson Shipping Co, Liverpool
FISH OIL—30 dms, Collett Week Corp, Valparaiso
FISHLIVER OIL—5 dms, Consumers Import Co, Yokohama
10 dms, Scandinavian Oil Co, Yokohama
22 dms, Arista Oil Products Co, Yokohama
5 dms, J D Smith Interocean, Yokohama
8 dms, Interocean Chemical & Minerals Corp, Yokohama
FUEL OIL—240,347 bbls, Hess Inc, Punta Cardon
171,000 bbls, Esso Export Corp, Aruba
106,464 bbls, Esso Export Corp, Caripito
105,938 bbls, New England Petroleum Corp, Punta Cardon
126,410 bbls, Asiatic Petroleum Corp, Curacao
GALLNUTS—51 bgs, Balfour Guthrie, Lattakia
119 bgs, Zinsser & Co, Beirut
40 bgs, Beirut
GARLIC POWDER—50 cs, Sokol & Co, Yokohama
310 cs, Venice
GELATIN—300 bgs, B Young & Co, London
30 dms, Hensel Bruckmann & Lorbacher, Rotterdam
100 bbls, Coignet Chemical Co, Antwerp
GERANIUM OIL—11 dms, Ufinindo International Corp, Djibouti
GINGER—84 bgs, Karl H Landes & E Balint, Kobe
200 bgs, L Willner & Co, Cochin
421 bgs, Mincing Trading Corp, Lagos
113 bgs, Lagos
ROOT—141 bgs, Wm E Martin, London
GLUE—500 bgs, Franco Belgian Trading Co, Marseille
80 bgs, Jung Forwarding Co, Liverpool
STOCK—364 bgs, Karr Ellis & Co, Liverpool
91 bdls, Brown Bros, Cristobal
GLYCERINE—270 tons, Procter & Gamble Co, Manila
GRAPHITE—900 bgs, Joseph Dixon Crucible Co, Hamburg
500 bgs, C Pettinos, Colombo
250 bgs, Asbury Graphite Mills, Colombo
500 bgs, Asbury Graphite Mills, Hong Kong
GUAR GUM—358 bgs, Heemsoth Kerner, Rotterdam
GUSATHION—12 dms, Chemagro Corp, Hamburg
GYPSUM—25,928 tons, U S Gypsum Co, Hantsport
3,950 tons, U S Gypsum Co, Little Narrows
3,700 tons, Allied Chemical & Dye Corp, Halifax
10,000 tons, National Gypsum Co, Halifax
103 bgs, Whittaker Clark & Daniels, Liverpool
HENNA POWDER—7 cs, Genoa
HEXYLRESORCINOL—1 cs, Polychemical Intern Corp, Hamburg
IODINE, CRUDE—328 kgs, Antony Gibbs & Co, Tocopilla
260 kgs, N Atlantic Fertilizer & Chemical Co, Yokohama
IRON BLUE—42 dms, Van Oppen & Co, Liverpool
OXIDE, SYNTHETIC—10 bgs, Mundus Chemical Products Corp, Hamburg
KARAYA GUM—365 bgs, Wernet Dental Manufacturing Co, Bombay
307 bgs, Stein Hall & Co, Bombay
184 bgs, Colony Import & Export Corp, Bombay
KOLA NUTS—65 bgs, S B Penick & Co, Lagos
148 bgs, Lagos
LAVANDIN OIL—10 dms, Fritzsche Bros, Marsille
LAVENDAR OIL—3 dms, Ungerer & Co, Marseille
LEMON OIL—10 hf cs, Bemo Shipping Co, Messina
20 qu cs, George Lueders & Co, Messina
LEMONGRASS OIL—1 dm, Puerto Barrios
LITHARGE—275 dms, Eagle Picher Co, Tampico
LIVERMEAL—1,201 bgs, Ovimpex Inc, Buenos Aires
LOCUST BEAN GUM—400 bgs, Haberland Manufacturing Co, Genoa
672 bgs, Stein Hall & Co, Genoa
1,000 bgs, Morningstar Nicol, Portimao
559 bgs, J L Quesada, Barcelona
LOCUST BEAN GUM—200 bgs, P A Dunkel, Rotterdam
200 bgs, Brown Bros, Valencia
400 bgs, Bank of N Y, Valencia
1,819 bgs, J L Quesada, Valencia
LOGWOOD EXTRACT—10 cks, American Dyewood Co, Liverpool
MAGNESITE—2,380 bgs, Golwynne Chemical Corp, Cochin
800 bgs, Globe Shipping Co, Trieste
MAGNESIUM CARBONATE—200 bgs, Reheis Co, Liverpool
MANGROVE BARK—1,089 bgs, Zanzibar
MARJORAM LEAVES—49 bls, Karl H Landes & E Balint, Marseille
MENTHOL—200 cs, Credit Suisse, Rijeka
MERCURY—800 flks, J H Schroder, Leghorn
41 flks, J L Fitzgerald, Tampico
50 flks, Livingston & Southard, Tampico
462 flks, Cadiz
MOLASSES—550 tons, W R Grace & Co, Salaverry
MUSTARD SEED—230 bgs, Transit Export & Import Co, London
100 bgs, R C Wehling Co, Rotterdam
MYROBALANS—3,200 bgs, Barkey Importing Co, Bombay
1,200 bgs, Hammond & Carpenter, Visakhapatnam
450 bgs, Barkey Importing Co, Visakhapatnam
NAPHTHENIC RESIDUE—234 dms, Advance International Ltd, Barranquilla
NICKEL SULFATE—34 bbls, Overseas Metal & Ore Corp, Gothenburg
100 bgs, Chase Manhattan Bank, Antwerp
NUTMEG—42 bgs, East India Trading Co, Singapore
220 bgs, Dodge & Olcott, Rotterdam
250 bgs, Shippers Produce Corp, Rotterdam
OLIVE OIL—195 dms, Marine Midland Trust Co, Seville
2,022 dms, Guaranty Trust Co, Seville
518 dms, Balbo Oil Corp, Cadiz
208 dms, Lionelli Packing Co, Cadiz
208 dms, Credit Suisse, Cadiz
100 dms, Credit Suisse, Seville
558 dms, Hanover Bank, Seville
486 dms, Chemical Bank, Seville
825 dms, Manufacturers Trust Co, Seville
49 dms, First National Chicago, Seville
49 dms, Chase Manhattan Bank, Seville
104 dms, A Fantis, Cadiz
402 dms, Barcelona
49 dms, Seville
ORANGE PEEL—76 bls, S B Penick & Co, Valencia
OREGANO LEAVES—167 bgs, C M Van Sillevoldt, Vera Cruz
130 bgs, Lansen Naeve, Vera Cruz
OXYNITROPHENYLARSONIC ACID — 20 dms, Rhodia Inc, Havre
PALMAROSA OIL—2 dms, Volkart Bros, Bombay
PALMKERNEL OIL—482 tons, E F Drew & Co, Rotterdam
49 dms, B M T Commodity Corp, Rotterdam
3 ctns, B M T Commodity Corp, Rotterdam
PAPAIN—50 cs, Bemo Shipping Co, Colombo
51 cs, Chas L Huisking & Co, Colombo
14 cs, R J Lepow, Tanga
25 hf chts, Prentiss Drug & Chemical Co, Colombo
136 hf chts, Chas L Huisking & Co, Colombo
15 cs, Dar es Salaam
PAPRIKA—225 bgs, Gallagher & Ascher, Alicante
135 bgs, A A Sayia, Alicante
972 bgs, Alicante
200 bgs, Rijeka
PATCHOULI OIL—4 dms, Givaudan Corp, Penang
PEARL ESSENCE—3 cs, Alltransport Inc, Rotterdam
1 cs, Vincente Cardenas, Rotterdam
PEATMOSS—750 bls, E J Lang, Bremen
400 bls, National Distributors, Bremen
280 bls, American Impex Corp, Bremen
1,350 bls, C Gastmeyer, Rotterdam
500 bls, Lion Trading Co, Hamburg
500 bls, C Fafard, Bremen
500 bls, Lewis Intern Co, Bremen
1,350 bls, New Amsterdam Import Co, Bremen
500 bls, Bruco Peatmoss Corp, Bremen
3,110 bls, Premier Peatmoss Corp, Bremen
2,800 bls, E Dunwoody, Bremen
2,050 bls, Lion Trading Co, Bremen
PEPPER, BLACK—140 bgs, E H Simpson & Co, Singapore
120 bgs, A G Dunn, Cochin
160 bgs, Dalamal & Sons, Cochin
440 bgs, Virchand Panachand, Cochin
360 bgs, Ludwig Mueller, Cochin
920 bgs, Polak Trading Co, Cochin
120 bgs, Borneo Sumatra Trading Co, Kuching
154 bgs, C Czarinkow, Singapore
80 bgs, Alleppey
160 bgs, Cochin
RED—85 bgs, Halford Lewis Co, Kobe
100 bgs, Joensson & Cross, Kobe
250 bgs, M J Golombeck, Yokohama
200 bgs, S L Jones & Co, Yokohama
500 bgs, Borneo Sumatra Trading Co, Yokohama
50 bgs, Chase Manhattan Bank, Kobe
WHITE—140 bgs, E H Simpson & Co, Singapore
PETITGRAIN OIL—15 dms, Colon Products Inc, Montevideo
PETROLEUM, CRUDE—102,876 bbls, Hess Inc, Las Piedras
200,000 bbls, Esso Standard Oil Co, Puerto La Cruz
56,205 bbls, Esso Standard Oil Co, Las Piedras
68,221 bbls, Esso Standard Oil Co, La Salina
111,555 bbls, Cities Service Oil Co, Las Piedras
PHTHALIC ANHYDRIDE—500 bgs, Fallek Products Co, Naples
PITUITARY POWDER, ANTERIOR LOBE—2 cs, Manteli Export Co, Buenos Aires
PLASTER OF PARIS—100 bgs, E H Cousins, Liverpool
POLLACKLIVER OIL—100 dms, National City Bank, Yokohama
CONCENTRATE—4 dms, Arista Oil Products Co, Yokohama
PSYLLIUM SEED HUSKS—127 bgs, T M Duche & Sons, Bombay
173 bgs, S B Penick & Co, Bombay
PYRETHRUM EXTRACT—60 dms, Mombasa
QUEBRACHO EXTRACT—5,275 bgs, International Products Corp, Buenos Aires
20 bgs, Barkey Importing Co, Liverpool
878 bgs, River Plate Corp, Buenos Aires
1,028 bgs, Buenos Aires
RADIUM ELEMENT—4 cs, Radium Chemical Co, Antwerp
RAUWOLFIA ROOT—7 bgs, P H Petry, Matadi
RED, IRON OXIDE—3 cks, O G Innes Corp, Liverpool
RHATANY ROOT—57 bgs, Callao
RICE STARCH—231 bgs, Aurora Manufacturing Co, Trieste
234 bgs, American Key Products, Trieste
ROSE HIP EXTRACT—6 cs, Barth Levitt Products, Gothenburg
ROSEWOOD OIL—30 dms, Astoria Panamericana, Gallao
RUTILE SAND—2,600 bgs, International Titanium Corp, Brisbane
SANDALWOOD—100 bgs, George Lueders & Co, Bombay
SEEDLAC—750 bgs, Wm Zinsser & Co, Calcutta
200 bgs, Haeuser Shellac Co, Calcutta
25 bgs, Lo Curto & Funk, Calcutta
200 bgs, Gillespie Rogers Pyatt, Calcutta
250 bgs, Haeuser Shellac Co, Bangkok
SESAME SEED—560 bgs, American Halvah Co, Puerto Barrios
1,006 bgs, Bankers Trust Co, Cristobal
221 bgs, Chase Manhattan Bank, Cristobal
700 bgs, Chase Manhattan Bank, Cristobal
300 bgs, Marine Midland Trust Co, Cristobal
50 bgs, Guaranty Trust Co, Cristobal
SHELLAC—100 bgs, Mac Lac Co, Calcutta
100 bgs, Mantrose Corp, Calcutta
100 bgs, Schwab Bros, Calcutta
100 bgs, C H Timm, Calcutta
SOAP BARK—503 bls, S B Penick & Co, San Antonio
SODIUM ALGINATE—20 ctns, T M Duche & Sons, Oslo
ARSENATE—120 dms, Harry Dixon & Sons, Glasgow
BICARBONATE—496 bgs, Chemical Manufacturing Co, Liverpool
CYANIDE—89 dms, Chemical Manufacturing Co, Liverpool
50 dms, C Hardy, Havre
PERBORATE TETRAHYDRATE — 2,000 bgs, Chemical Manufacturing Co, Liverpool
100 dms, Chemical Manufacturing Co, Liverpool
SILICOFLUORIDE—554 bgs, Philipp Bros Chemicals, Kobe
400 bgs, Tar Residuals Inc, Nagoya
264 dms, Republic Chemical Corp, Rijeka
SQUALENE OIL—1 dm, Arista Oil Products Co, Yokohama
STANNIC CHLORIDE, ANHYDROUS—19 dms, Mercantile Metal & Ore Corp, Havre
STARCH—7,000 bgs, Morningstar Nicol, Rotterdam
SUMAC EXTRACT—60 cks, J E Bernard, Glasgow
TALC—500 bgs, L A Salomon & Bro, Bordeaux
572 bgs, C B Chrystal Co, Bombay
TARTARIC ACID—40 dms, Frank Samuel & Co, Marseille
THYROID POWDER—10 dms, Tuteur Bio Chemicals, Liverpool
TOLU BALSAM—13 cs, Intermaritime Forwarding Co, London
TRAGACANTH GUM—100 bgs, Gill & Duffus, Khorramshahr
17 cs, Am-Iran Co, Khorramshahr
17 bgs, Khorramshahr
TRICHLOROETHYLENE—375 dms, Chemical Manufacturing Co, Liverpool
TRIHYDROXYBENZENE—4 kgs, D F Young, Liverpool
TURMERIC—9 bgs, S B Penick & Co, Bombay
80 bgs, S B Penick & Co, Cochin
80 bgs, Mincing Trading Corp, Cochin
133 bgs, Port Au Prince
720 bgs, Alleppey
ULTRAMARINE BLUE—50 dms, Hansborg & Co, Rotterdam
200 bgs, T H Deutz, Rotterdam
UREA—1,800 bgs, Nylos Trading Co, Genoa
SYNTHETIC—2,000 bgs, Chemical Manufacturing Co, London
VALERIAN ROOT—116 bgs, S B Penick & Co, Bombay
VALONIA EXTRACT—1,000 bgs, National Bank of Greece, Port Iero
VANILLA BEANS—13 cs, Dammann & Co, Marseille
VETIVER OIL—1 dm, Centflor Manufacturing Co, Port Au Prince
1 dm, Lautier Fils Inc, Port Au Prince
2 dms, Van Ameringen Haebler, Port Au Prince
14 dms, Ufinindo International Corp, Djibouti
ROOT—25 bgs, Norwalk Mills, Cochin
WHITING—4,400 bgs, N H Weitzner, Antwerp
460 bgs, Antwerp
WOOL ALCOHOL—20 cs, N I Malmstrom, Liverpool
GREASE—110 dms, Fanning Chemical Corp, Nagoya
57 dms, N I Malmstrom, Liverpool
46 cks, Venice
YACCA GUM—456 bgs, Commercial Bank of Australia, Port Adelaide
ZINC OXIDE—2,000 bgs, Pigment & Chemical Co, London
ZIRCON SAND—2,400 bgs, International Titanium Corp, Brisbane
2,200 bgs, Lo Curto & Funk, Brisbane
800 bgs, Berkshire Chemicals Inc, Brisbane

Los Angeles

AGAR—25 cs, Pan Asiatic Trading Co, Shimizu
BONEMEAL—1,800 bgs, Frank P Dow Co, Manchester
2,204 bgs, Trans Atlantic Animal By Products Co, Alexandria
COPRA—400 tons, Atkins Kroll & Co, Pago Pago
CAKE—1,000 bgs, Balfour Guthrie & Co, Cebu
2,240 bgs, Cargill Inc, Manila
300 tons, Balfour Guthrie & Co, Manila
FISHMEAL—2,200 bgs, Van Camp Sea Food Co, Pago Pago
PAPRIKA—200 bgs, Sopac Transportation, Marseilles
680 bgs, Sopac Transport Co, Alicante
PEAT MOSS—950 bls, Wilbur Ellis Co, Hamburg
PEPPER—105 bgs, C Czarnikow Co, Singapore
90 bgs, Borneo Sumatra Trading Co, Singapore
PETROLEUM, CRUDE—19,383 tons, General Petroleum Corp, Puerto La Cruz
32,278 tons, Wilshire Oil Co of Calif, Aruba
198,182 tons, Union Oil Co of Calif, Puerto La Cruz
TAPIOCA FLOUR—500 bgs, Stein Hall & Co, Bangkok
UREA—1,000 bgs, Guaranty Trust Co, Antwerp
WHITING—2,000 bgs, Antwerp
WOOL GREASE—10 dms, Pacific Coast Borax Co, Manchester

Philadelphia

AMMONIUM BICARBONATE—50 dms, Chemical Manufacturing Co, Glasgow
ASBESTOS FIBER—250 bgs, Manufacturers Trust Co, Lourenco Marques
4,890 bgs, Chas Kurz Co, Lourenco Marques
2,010 bgs, Lourenco Marques
BONE—6,086 bgs, Ralli Bros, Karachi
BONEMEAL—4,690 bgs, C G Trading Co, Calcutta
CAMPHOR POWDER—15 cs, Vicks Chemical Co, London
30 cs, Vicks Chemical Co, Hamburg
CASEIN—1,000 bgs, Guaranty Trust Co, Buenos Aires
CRESYLIC ACID—401 dms, Concord Chemical Co, Rotterdam
100 dms, Glasgow
60 dms, Sydney
EPSOM SALT—600 bgs, Vandergrift Co, Bremen
FISHLIVER OIL—75 dms, Yokohama
GELATIN—400 bgs, T M Duche & Sons, Havre
LOCUST BEAN GUM—610 bgs, J L Quesada, Valencia
MOLASSES—2,966,441 gals, Tarafa
941,228 gals, Antilla
2,033,739 gals, Neuvitas

NAPHTHALENE — 500 bgs, Gallard Schlesinger, Hamburg
500 bgs, Antwerp
NIGER SEED—545 bgs, R T French, Visakhapatanam
PEATMOSS—800 bls, Halfmoon Manufacturing & Trading Co, Rotterdam
1,500 bls, Keer Maurer, Bremerhaven
895 bls, Van Zanten & Co, Bremen
1,000 bls, Keer Maurer, Bremen
1,250 bls, Van Zanten & Co, Hamburg
2,000 bls, Premier Peatmoss Corp, Bremen
250 bls, E J Lang, Hamburg
2,000 bls, Hamburg
1,526 bls, E Dunwoody, Bremen
PETROLEUM, CRUDE—215,723 bbls, Atlantic Refining Co, Pamatacual
122,880 bbls, Atlantic Refining Co, Banias
PETROLEM, CRUDE—109,260 bbls, Atlantic Refining Co, Puerto La Cruz
936,254 bbls, Gulf Oil Corp, Puerto La Cruz
1,140,356 bbls, Gulf Oil Corp, Mena Al Ahmadi
116,727 bbls, Socony Mobil Oil Co, Covenas
133,438 bbls, The Texas Co, Covenas
116,690 bbls, The Texas Co, Puerto La Cruz
QUEBRACHO EXTRACT—619 bgs, Bank of N Y, Buenos Aires
609 bgs, H Elkan & Co, Buenos Aires
RUTILE SAND—13,455 bgs, Brisbane
SODIUM SILICOFLUORIDE—334 bgs, Mercer Co, Kobe
734 bgs, Harry Dixon & Sons, Kobe
SULFATE—1,200 bgs, Vandergrift Co, Antwerp
TAPIOCA FLOUR—540 bgs, Stein Hall & Co, Itajai
660 bgs, Geismar & Co, Bangkok
UREA—4,000 bgs, Chemical Manufacturing Co, Glasgow
WHITING—3,200 bgs, Antwerp
YACCA GUM—155 bgs, Port Adelaide
ZIRCON SAND—3,007 bgs, International Mineral Corp, Brisbane
17,895 bgs, Brisbane

San Francisco

AGAR—20 bls, Lees Agency, Kobe
ALUMINUM SULFATE—100 bgs, C M C Chemicals, Manchester
AMMONIUM CHLORIDE—1,000 bgs, C M C Chemicals, Manchester
CARDAMOM—11 cs, McCormick & Co, London
SEED—15 cs, Wm E Martin, San Jose
COPAL GUM—140 bgs, H W Peabody & Co, Manila
COPRA—1,000 tons, Pacific Vegetable Oil Corp, Cebu
300 tons, Cargill Inc, Cebu
1,283 tons, Procter & Gamble Co, Cebu
500 tons, Marwood Co, Cebu
1,000 tons, Pacific Vegetable Oil Corp, Masbate
700 tons, Procter & Gamble Co, Leyte
800 tons, Pacific Vegetable Oil Corp, Legaspi
CAKE—2,000 bgs, Balfour Guthrie, Cebu
4,000 bgs, Internatio Rotterdam, Cebu
CUMIN SEED—782 bgs, Williams Dimond & Co, Kobe
FERROUS SULFATE—1,250 bgs, United Mineral & Chemical Products, Kobe
LIVERMEAL—256 bgs, International Packers, Brisbane
MOLASSES—1,825 tons, Kaohsiung
NUTMEG—40 bgs, London
PAPRIKA—1,800 bgs, B C Ireland, Vancouver
PEATMOSS—500 bls, East Asiatic Co, Bremen
650 bls, East Asiatic Co, Hamburg
PETROLEUM, CRUDE—282,922 bbls, Standard Oil Co, Sungai Pakning
167,037 bbls, Tide Water Associated Oil Co, Sungai Pakning
POLLACKLIVER OIL—150 dms, Wheeler & Miller, Yokohama
POTASSIUM NITRATE—500 bgs, J H Schroder, Antwerp
SODIUM BICARBONATE—1,000 bgs, C M C Chemicals, Manchester
VANILLA BEANS—9 cs, Williams Dimond Co, Pago Pago
WOOL GREASE—30 dms, International Packers, Brisbane

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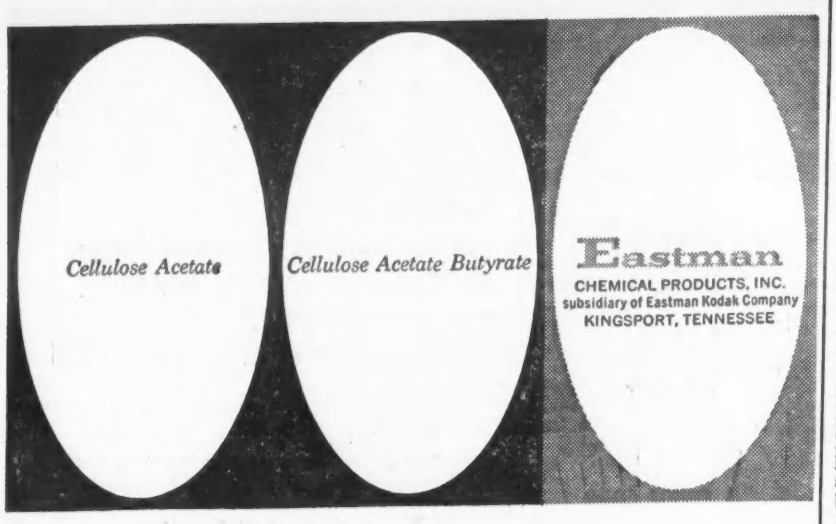

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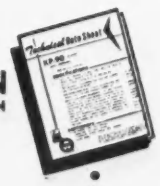

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Coatings Materials

A major supplier advanced quotations effective May 18 on lead oxides, litharge and orange mineral to offset recent cost increases. At press time other manufacturers were considering similar changes but final decisions had not been reached. As a result, price ranges are now in effect as follows:—95 percent red lead, carlots, 18½-19c. per pound; less carlots, 19-20c. per pound; 97 percent red lead, carlots, 18¾-19.2c. per pound; less carlots, 19¼c.-20.2c. per pound; 98 percent red lead, carlots, 19-19.35c. per pound; less carlots, 19½-20.35c. per pound; litharge, carlots, 17½-18c. per pound; less carlots, 18-19c. per pound; orange mineral, less carlots, 21.60-22.35c. per pound.

High abrasion oil furnace black prices will be reduced 1c. per pound by a supplier, effective June 1. Expanding production capacity has made this price adjustment possible, the company said. The price differential between bulk and bags will be made a uniform ½c. per pound, effective the same date.

Plasticizer trading was fair to moderate during the week. Dioctyl adipate, recently reduced 2½c. per pound, was moving at a good clip, dealers reported. Business in synthetic resins was seasonal. No price changes have been reported in these materials since April 1, when alkyds were advanced ½c. per pound.

The shellac market appears to have attained good balance, following several weeks of uneven trading and price reductions in the orange grades. Prices of orange grades, now 4c. per pound below quotations prevailing a month ago, were said to be strong, against a seasonal volume of demand. Previously demand was slow and supplies somewhat long.

Copal and dammar gum moved evenly during the week at a fair pace. Except for some minor adjustments, prices of gum have been unchanged since last December. Business is still focused on immediate requirements although some interest is being shown in futures. Prices at present appear steady to firm, with the lower grade dammars showing particular firmness.

The casein market is still convalescing from the doldrums that set in last February. Prices were reduced an additional ½c. to 21-21½c. per pound, but buying interest remained minimal. A while back it would have seemed a good guess that the market would pick up at the present price, but apparently a still lower price is desired by users. Meanwhile, the bulk of business formerly enjoyed by casein has been diverted to soya protein.

Price Trends

Advanced
None

Reduced
Casein, imp., Arg., ½c. per lb.

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	May 20, 1955
100.14	100.14	100.15	97.17

For Current Prices see Page 9

Prime Pigments

Aluminum Paste, Powder—Net shipments of atomized and grained aluminum powder were 721,000 pounds in March 1956 as compared with 559,000 pounds during February, according to a report of the Department of Commerce. Flaked powder shipments in March were 472,000 pounds, up 90,000 pounds from the previous month. Shipments of aluminum paste were 1,319,000 pounds, as compared with 954,000 pounds during February. Shipments in March 1955 were as follows: —Atomized and grained powder, 1,872,000 pounds; flaked powder, 301,000 pounds; and paste, 1,093,000 pounds.

Cadmium Colors—Being cheaper and in better supply then selenide lithopones, the new mercury lithopones are said to be gaining customers rapidly. Yet the shortage of selenide lithopones is so acute, production is booked about 45 days in advance.

Carbon Black—A top supplier has announced price revisions to be put into effect June 1. High abrasion oil furnace black will be reduced 1c. per pound to 6½c. per pound in bulk and 7c. per pound in paper bags. Expanding production capacity has made this price adjustment possible, the company said. The price differential between bulk and bags will be made a uniform ½c. per pound, effective the same date. At present the differential varies with different grades of carbon black.

Lead Pigments—Prices were advanced approximately ½c. per pound effective May 18 by a supplier, to offset recent cost increases. At press time other manufacturers were considering similar changes but final decisions had not been reached. As a result price ranges are now in effect as follows:—95 percent red lead, carlots, 18½-19c. per pound; less carlots, 19-20c. per pound; 97 percent red lead, carlots, 18¾-19.2c. per pound; less carlots, 19¼-20.2c. per pound; 98 percent red lead, carlots, 19-19.35c. per pound; less carlots, 19½-20.35c. per pound; litharge, carlots, 17½-18c. per pound; less carlots, 18-19c. per pound; orange mineral, less carlots, 21.60-22.35c. per pound.

Zinc Pigments—Despite reduction in buying interest, prices were steady to firm in last week's market. The sales lag is variously attributed by dealers to the cutbacks in automobile production and a more cautious attitude toward inventories on the part of buyers in general. Dealers' supplies are plentiful at present but not excessively long.

Carlot quotations are:—Zinc oxide, American process, lead-free, 14½c. per pound; leaded, 35 percent, 15½c. per pound; 50 percent, 15⅞c. per pound; French process, green seal, 15¾c. per pound; red seal, 15¼c. per pound, white seal, 16¼c. per pound, and USP, 17¼c. per pound.

Lacquer Materials

Dioctyl Adipate—Recently prices were lowered 2½c. per pound to reflect a reduction in adipic acid. Quotations are now 42c. per pound for drums in carlots; 43c. per pound for drums in less carlots; and 40c. per pound for tanks.

Di-Iso-Decyl Adipate—Like dioctyl adipate, this material was reduced 2½c. per pound recently following a reduction in adipic acid. Quotations are 42c. per pound for drums in carlots; 43c. per pound for drums in less carlots; and 40c. per pound for tanks. Last week's sales were reported moderate to good, with supplies adequate.

Phthalates—Quotations on all phthalates were reported steady to firm. Trading was more active, at times hitting an excellent stride. Price listings for dibutyl phthalate continue as follows:—19½-21c. per pound for quantities of 1-9 drums; and 16½-18c. per pound for tanks.

Sebacates — A brisker sales pace was manifested last week. Prices, unchanged to date this year, were steady to firm. Quotations on dibutyl sebacate are 66c. per pound for drums in carlots; 66½-67c. per pound for drums in less carlots; and 64-64½c. per pound for tanks. Sup-

Coatings Shipments, Output: March

	Factory shipments—Dollars—		Reported production—Gallons—	
	March	February	March	February
Trade sales	$75,189,000	$71,591,000	21,950,000	20,847,000
Industrial sales, total	56,329,000	50,770,000	21,077,000	19,167,000
Paint and varnish	42,104,000	37,254,000	15,724,000	14,061,000
Lacquer	14,225,000	13,516,000	5,353,000	5,106,000
Overall totals	131,518,000	122,361,000	43,614,000	40,535,000

Total sales, January through March:—$373,140,000.

Coatings Materials

plies were described as sufficient for all consumer requirements.

Fillers and Inerts

Barytes—Buying interest in this material was reported normal. Prices are steady at $25 per ton for Southern off-color barytes. Water-grade material is $45 per ton, carlots, East St. Louis; and $65.10, ex-whse., New York.

Blanc Fixe—A $10 per pound price increase was posted last September. Since then the material has been stable on the East Coast, although a $5 increase was made effective last November for Los Angeles imports. Quotations are $190 per ton for dry blanc fixe by-product in carlots; and $200 per ton for less carlots. Direct process material is $110 in carlots; less carlots are $120 per ton.

Bentonite—No price changes have been reported this year. Domestic 200-mesh bentonite is listed at $14 per ton. Imported Italian white high gel. is $80.60 per ton in 5-ton lots, and $83.10 in 1-ton lots. Low gel. is $78.95 in 5-ton lots, and $81.45 in 1-ton lots.

Mica—Quotations were advanced ½c. a month ago, following increases in production costs. Dry-grd. mica is now 3-4½c. per pound. Wet-grd. material ranges 6¾-9c. per pound.

Natural Resins

Copal Gum—Demand was fair against ample supplies. Prices were firm, particularly in the lower grades. Quotations on Manila grades continue as follows:—C, 41-43c. per pound; CBB, 37c. per pound, nominal; DBB, 29-31c. per pound; DK, no stocks; MA, 22-24c. per pound; and WS, no stocks.

Dammar Gum—Prices have been gengenerally steady during the current year. Last week the market was firm, with deman focused on immediate needs. Spot prices on the most active materials continue as follows:—Singapore No. 1, 47-49c. per pound; No. 2, 30-31c. per pound; No. 3 dust, 16½-17c. per pound; No. 3 seeds, 20-22c. per pound; and Siam, 39c. per pound. Current supplies are plentiful.

Shellac—Prices were firmly maintained, with demand holding to seasonal levels. Dealers' supplies were reported in good balance with current market needs. Orange shellac quotations, unchanged for the past two weeks, are as follows:—Lemon No. 1, 48c. per pound; No. 2, 46c. per pound; Superfine, 43-44c. per pound; and TN, 42c. per pound.

Several weeks ago the market had shown some weakness. At that time, prices of orange grades fell 4c. per pound, reflecting reduced demand and excessive supplies. Since then, the market has gradually achieved good balance.

Miscellaneous

Casein—Material from New Zealand has eased 1c. per pound to 25-26c. per pound. Argentine casein was down ½c. to 21-22c. per pound. Buying interest was reported very quiet and prices appeared weak. Although there are no offerings from Europe, demand is so low that supplies in the Argentine continue to lengthen.

Signs of the anticipated recovery in casein have not yet appeared. A while back it seemed a good guess that a price of 21c. per pound would be low enough to restore consumer interest. Apparently, a still lower price is desired. Meanwhile, soya protein continues to account for the bulk of business formerly enjoyed by casein.

The present situation is the direct result of a price spiral that occurred last Fall and Winter when casein became critically short. At that time the price soared to 36c. per pound. Consumers found that price prohibitive and many have since substituted soya protein in their operations.

Naval Stores

Rosin, Gum

(USDA, per 100 lbs.)

	Fri. May 11	Mon. May 14	Tues. May 15	Wed. May 16	Thur. May 17
Drums—					
M		$8.15	...	$8.17§	...
N	$8.28	...	...	...	...
WG	8.48	...	$8.38	...	$8.45
WW	8.56§	...	8.55	8.51§	...
Bags—					
K	...	...	...	8.10	...
WG	...	8.55	...	...	...
WW	...	...	8.65	8.55	...

Tankcars (for week ended May 11)—M or better, $7.82§; K or better, $7.69

Sales, USDA

387* 377* 985* 1,107* 480*

New York

(per 100 lbs., c.l., Friday)

B through N, $9.40; WG, $9.55; WW, $9.65

Turpentine, Gum

(USDA, per gal., 7.2 lbs.)

Price	.5575	.55	...	.555	.5575
Sales	4.000¶	4.000¶	...	6.000¶	4.500¶

New York, Friday, per gal. 7 lbs., tankcars, 63½c., l.c.l. 75c.

*Drums equivalent. ¶Gallons. §Average price.

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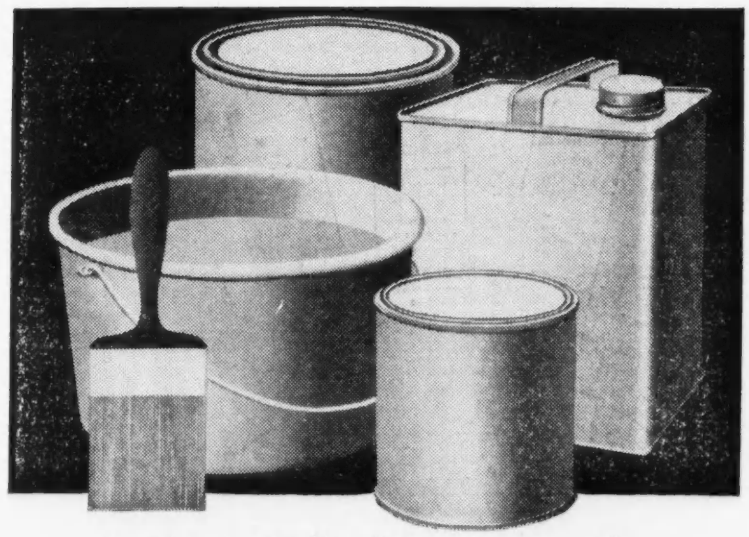

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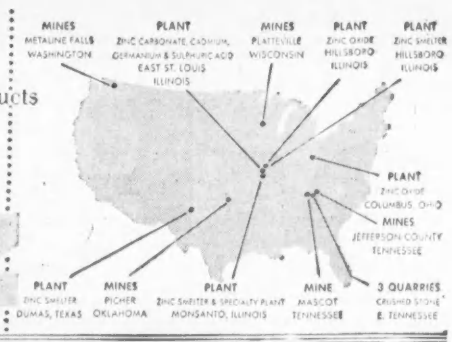

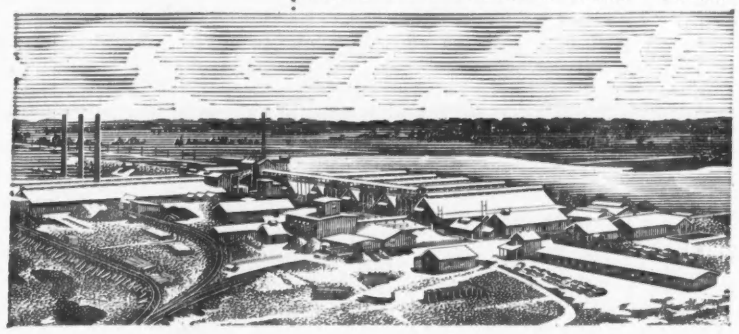

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Atom Power

—Continued from page 5

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Affection on Electrometallurgy

"Electrometallurgy stands to gain tremendously as soon as atomic power comes of age," he continued. "All of us know what low-cost electricity has done for aluminum. Today new wonder metals such as titanium and zirconium are used sparingly because of their high price, but these materials and many others may become competitive with those now used should cheap energy be a result of nuclear development."

Mr. Wormser believed that the mining industry stands to gain all along the line if the atom can offer low-cost power. It was a matter of simple arithmetic, he said. "Low-cost power spells lower production costs. Lower production costs mean that lower grade reserves can be brought into economic production, and this is imperative if the minerals industries of this country are to stay in business and contribute their fair share to our expanding economy."

The steel industry, just in its steelmaking activity, in 1954 consumed the equivalent of over 110 million tons of coal, reported Charles M. White, president of Republic Steel Corporation, Cleveland, Ohio.

Steel's Use of Coal

Of this amount, more than 6 million tons was in the form of purchased electricity, 22 million tons was purchased as fluid fuel, and 82 million tons of coal was actually used for coke, steam and gas producers. "What these figures mean," said Mr. White, "is that for each ton of steel shipped to the consumer, we use one and three quarter (1.75) tons of coal or its heat equivalent.

"Another way to view that figure is to note that at present prices, our fuel bill represents more than 10 percent of our production costs," he continued. "I hope these statistics explain why we in steel share an interest in atomic power," he observed.

With the aid of atomic energy we are improving fertilization practices, controlling insect pests, speeding up the natural rate of mutations in plants and animals and developing new lines of plants that are resistant to disease, and improving food marketing, according to Maj. Gen. Alfred B. Denniston, Deputy Quartermaster General, U. S. Army.

The advance of America's electric power industry into the atomic age will be marked by orderly evolution rather than violent change. This is the opinion of Detroit Edison president Walker L. Cisler.

He pointed out that today's phenomenal American industrial community owes much to electric power companies and power equipment manufacturers who for seventy-five years have carried on a continuous and highly intensive development of the science of power supply.

General Tire Starts Ashtabula Plant Work

Work has started on the first major expansion of General Tire & Rubber Company's Ashtabula chemical plant, while P. J. Wallace has assumed his new duties as plant manager.

Expansion of the 18-month-old chemical installation will boost by 50 percent the plant's vinyl resin productive capacity. It has been turning out the basic plastics raw material at the rate of 25 million pounds annually. Original cost of the plant was $6 million. Mr. Wallace replaces James A. Pollock, who will direct the design and construction of General's new synthetic rubber plant at Odessa, Tex.

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Current Prices

—*Continued from page 33*

Zinc oxide, French process, white seal, bgs., c.l., same basis	lb.	.16¼	—
l.c.l., same basis	lb.	.17¼	—
USP, ctns., c.l., frt. alld	lb.	.17¼	—
l.c.l., same basis	lb.	.18¼	—
Zinc oxide Pac. coast prices 1c. higher.			
Phenolsulfonate, NF, gran., dms.	lb.	.39	—
powd., dms	lb.	.42	.49
Resinate, precip., 7.2-7.6% Zn., dms., frt. alld	lb.	.29	—
Silicofluoride, dms., works	lb.	.12½	.14
Stearate, tech., USP, ctns., c.l.	lb.	.39	—
	lb.	.39	—
l.c.l.	lb.	.40	.44
Sulfate, powd., monohydrate, 36% Zn, bgs., c.l., dlvd E	100 lbs.	8.75	—
l.c.l., dlvd E	100 lbs.	9.75	—
Zinc sulfate in bbls. 40c. higher.			
USP, gran., dms	lb.	.26	—
Sulfide, pure, bgs., c.l., dlvd	lb.	.2530	—
Undecylenate, dms.	lb.	2.25	3.50
Yellow (see Yellow, zinc).			
Zinc-ammonium chloride, bgs., c.l., works	100 lbs.	9.65	—
bbls., c.l., works	100 lbs.	10.25	—
l.c.l., works	100 lbs.	10.75	—
Zinc-formaldehyde sulfoxylate, basic, dms., c.l.	lb.	.25½	—
l.c.l.	lb.	.26	.41½
Zircon (G), gran., bgs., c.l., works,	lb.	.03½	—
5 tons to c.l., works	lb.	.03⅜	—
1 ton to 9,999-lb. lots, works,	lb.	.04	—
smaller lots, works	lb.	.06½	—
milled, bgs., c.l., works	lb.	.04½	—
5 tons to c.l., works	lb.	.04⅜	—
1 ton to 9,999-lb. lots, works,	lb.	.04⅝	—
500-1,999-lb. lots, works	lb.	.07½	—
Zircon (G) in barrels, 1c. higher.			
Zirconium acetate, 13% com., ZrO_2, c.l., 30,000 lbs. minimum, works	lb.	.23	—
Hydride, ctns., works	lb.	7.00	8.45
Nitrate, dms., ex whse	lb.	4.50	7.00
Oxide, 92½-99%, white, grd., bbls. or bgs., works	lb.	1.50	—
Zirconium oxide, 92½-99%, lump, electric-fused, bgs., c.l., works	lb.	.44	—
5-ton lots, works	lb.	.44½	—
1 ton to 9,999-lb. lots, lbs., works	lb.	.45	—
CP, white, grd., bbls., or bgs., works	lb.	1.50	—
lump, electric fused, bags, 500 to 1,999-lb. lots, works	lb.	.45½	—
smaller lots, works	lb.	.48	—
milled, electric-fused, bgs., c.l., works	lb.	.59	—
5-ton lots, works	lb.	.59½	—
1 ton to 9,999-lb. lots, works	lb.	.60	—
500 to 1,999-lb. lots, works	lb.	.60½	—
smaller lots, works	lb.	.63	—
Oxychloride, cryst., ctns., 5-ton lots, works	lb.	.35½	—

Plastics Unit Makes

—*Continued from page 7*

structural building materials, decorative building materials, and special code problems.

The SPI annual meeting will take place at a luncheon on June 13 at which new officers will be announced, society reports made, and a special report on the FCC delivered.

Concurrent sessions on refrigerating and air-conditioning and communications are scheduled for June 14. Subjects to be discussed in the refrigeration and air conditioning session will include sheet forming, moldings, insulations, ducting, and design engineering. The communications session will cover topics such as vacuum forming, moldings, extrusions, molded finish circuits, and encapsulation and miniaturization.

The luncheon June 14 will be devoted to retailers with P. M. Talbott, president of the National Retail Dry Goods Association, speaking on "A Behind-The-Counter-View of Plastics." The June 15 morning session is to be turned over to a special management-business symposium, at which the principle topic will be "Sound Costing Practice."

The exposition will be the industry's largest to date. More than 230 individual companies will take part in the show occupying more than 300 booths and 70,000 square feet of display space. The show is expected to attract more than 20,000 representatives of business, industry, retailing, and government.

FDA Is Weighing Easing Of Prescription Regulations

The Food and Drug Administration proposes to amend its rules relating to prescription drugs to permit the over-the-counter sale of diamthazole dihydrochloride and dextromethorphan hydrobromide.

The chemical name for diamthazole dihydrochloride is 2-dimethylamine-6-(b-diethylamino ethoxy)-benzothiazole dihydrochloride. It is to be labeled for use only by adults in the event of irritation.

Dextromethorphan hydrobromide consists chemically of dextro-3-methoxy-N-methylmorphinan hydrobromide and is to be labeled for the temporary relief of coughs due to minor conditions in which it is indicated.

Synthetic Rubber Needs Told Before ACS Unit

Successful production of future aircraft and missiles hinges upon the development of new rubber-like high polymers, capable of functioning at temperatures above 300 degrees Fahrenheit and below minus sixty-five degrees.

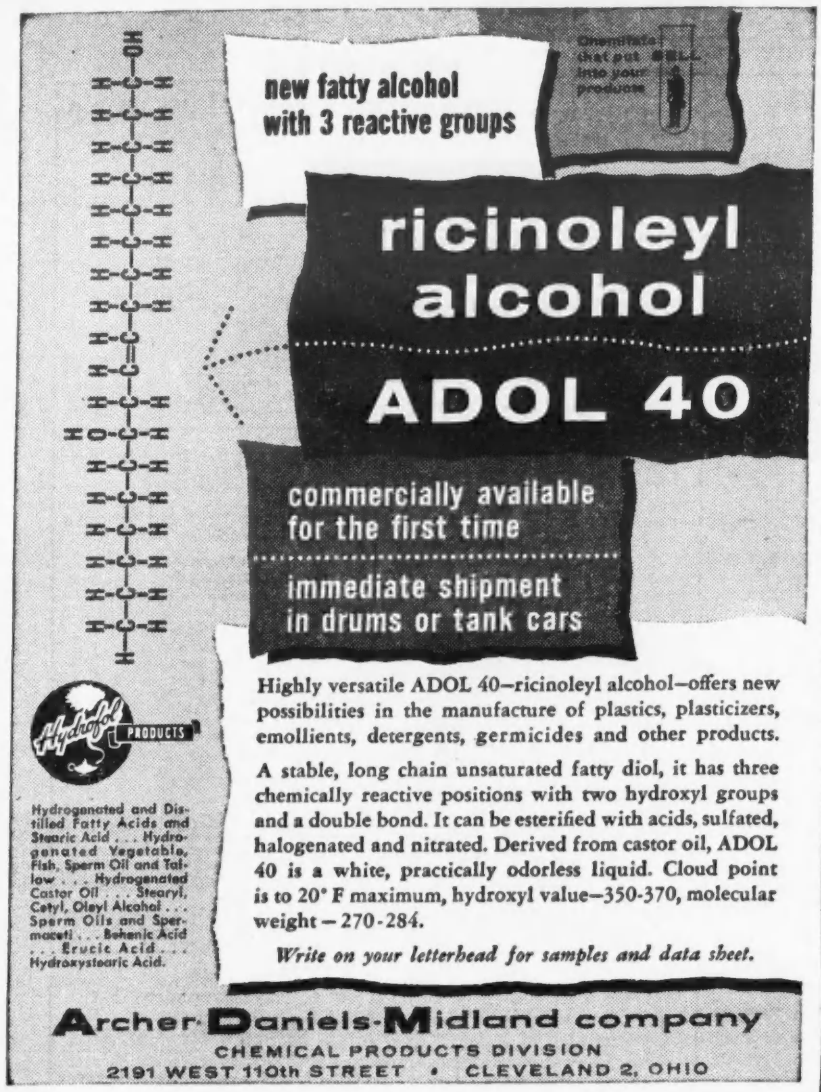
So said Ralph M. Harper, of the aeroneutical materials laboratory of the Naval Air Experimental Station, Philadelphia, before the sixty-ninth meeting of the Rubber Division of the American Chemical Society at the Cleveland hotel, Cleveland, Ohio.

Phillips Petroleum's new butadiene-2-methyl-5-vinylpyridine rubbers were discussed before the meeting by H. E. Railsback, of the company's research and development department at Phillips, Tex.

Compared with conventional general purpose rubber, the new products promise rubber parts that will carry heavier loads, superior color, and be flexible at lower temperatures, according to Mr. Railsback.

Phillips Sets Up Office

Phillips Chemical Company, Bartlesville, Okla., a wholly-owned subsidiary of Phillips Petroleum Company, has established a new district sales office of its plastics sales division to serve southwestern and southern states. R. F. Uber, formerly "Philgas" sales engineer in the Denver sales division has been promoted to manager of this new district office located at Bartlesville.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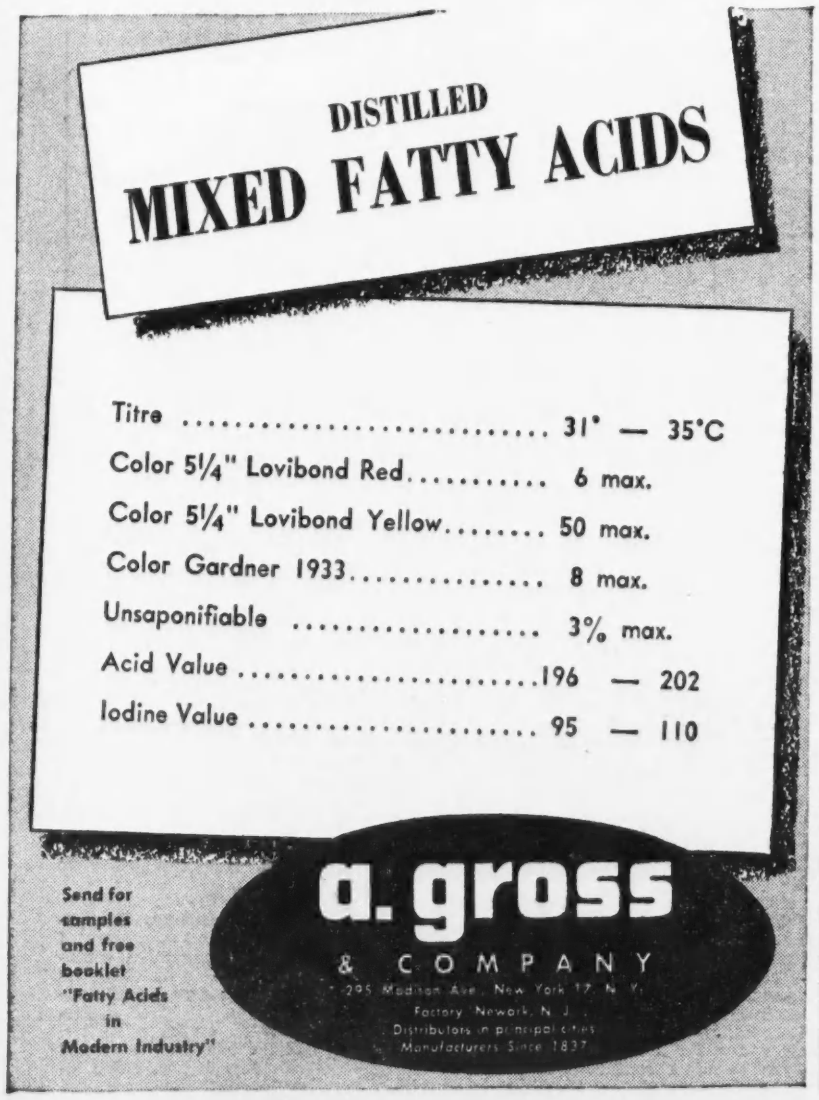
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Oils, Fats and Waxes

Quiet demand for edible oils further weakened quotations for all grades. Export business dried up and domestic trading was light and spotty. Soybean dropped fractionally while cottonseed and peanut oil rallied and closed steady. Trading in olive oil subsided due in part to available stocks for shipment from the Argentine. Shipments laid down New York were quoted at about the same levels as Spanish oil on the spot.

Italy has requested offers of 12,000 tons of refined cottonseed or soybean oil. Bids to be submitted Tuesday.

Tallow and greases remained steady. Trading was reported moderate, chiefly for domestic account, while export interest was limited. Offers were light and closely held for all grades. Lard was irregular and closed slightly lower.

Tung oil was stronger and advanced fractionally due to improved business. Oiticica also was steadier and in better demand. Brazilian castor oil was firmer, with the increased cost of replacements and prices were lifted fractionally. Refined fish also was stronger, and raised one-half cent per pound, reflecting the firmness of crude menhaden. Linseed oil was unchanged and steady despite slightly lower flaxseed. Scarcity of rapeseed oil resulted in another fractional price advance.

Prices of carnauba wax continued to move upward and scored net gains of 7 cents per pound, for all grades. Stocks on spot were light, with yellow especially scarce. Replacements from Brazil also were higher and offers continued limited. Trading was active, but not to the extent of the previous week. Candelilla wax also was stronger and business took place at an increase of 3 cents per pound. Stocks were light and firmly held.

Price Trends

Advanced

Acid, capric, 1c. per lb.
Caprylic, 1c. per lb.
Lauric, 1c. per lb.
Linseed meal, 50c. to $1 per ton.
Oil, castor, Braz., ¼c. per lb.
Fish, refd., ½c. per lb.
Rapeseed, ¼c. per lb.
Tung, ½c. to ¾c. per lb.
Soybean meal, $2 per ton.
Wax, candelilla, crude, 3c. per lb.
refd., 3c. per lb.
Carnauba, crude, 7c. per lb.
refd., 7c. per lb.

Reduced

Cocoa butter, 1c. per lb.
Lard, cash, 1 10c. per lb.
Oil, soybean, crude, ¼c. per lb.
refd., ¼c. per lb.

Comparative Price Indexes

(100—1949 average)

Last week	Prev. week	Last month	May 20, 1955
119.57	118.75	113.10	104.19

For Current Prices see Page 9

Vegetable Oils

Castor—Trading was reported restricted to actual needs. Domestic grades were held at former levels. No. (1) Brazilian was firmer and held at 18½c. per pound, tankcars, New York, prompt delivery.

Commodity Credit Corporation offered for sale about 3,500,000 pounds of castor oil for industrial use which is located in tanks at Chickasha, Okla., and will be sold on competitive bid basis, f.o.b. tankcars or tankwagons. Bids must be received by the Dallas CSS Commodity Office, 500 South Ervay St., Dallas 1, Tex., not later than 2:00 P. M., CST, May 22, 1956. Acceptance or rejection will be made by 5:00 P. M., CST, May 23.

Coconut—Trading was slow. Crude was quoted at 12¾c. per pound, tankcars, f.o.b. Pacific coast, May and 13⅞c., New York basis.

Corn—Crude was quiet and held at 16c. per pound, tankcars, f.o.b. mills, prompt shipment. Refined was quoted at 19.47c., tankcars, New York, prompt delivery.

Cottonseed—Liberal liquidation continued to unsettle the future market last week. Quotations dropped fractionally especially for nearby. Lack of export business and slow domestic demand were dominant factors. Cash oil was inactive and easier. Refined salad oil was lower and offered at 19½c. per pound, tankcars, New York, prompt delivery. Crude oil was inactive and lower. Tankcars were nominal at 15⅝c. to 15¾c. per pound, f.o.b. mills, Valley and 15½c. to 15¾c., Texas as to location.

Cottonseed Oil Futures

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended Friday, May 18, follow:—

	Sales	Cents per pound—High	Low	Close
May	50	18.13	17.70	Expired
July	871	18.55	17.60	17.93S
Sept.	342	17.99	17.12	17.50@17.53
Oct.	1	16.60	16.60	16.45@16.55
Dec.	154	16.60	15.94	16.22@16.24
Jan.	2	16.02	16.02	16.15@16.25
Mar.	104	16.55	16.00	16.15@16.19
May (1957)	85	16.50	15.95	16.05@16.15

Total sales, 1,609 contracts.

Commodity Credit Corporation will make price support loans on 1956-crop upland cotton available to eligible producers to August 1, 1956, at 28.85 cents per pound, gross weight, basis middling ⅞-inch cotton at average location and middling 1-inch 3.40c. per pound above the rate for ⅞-inch cotton.

Memphis.—Crude cottonseed oil nominal at 15½c. per pound, tankcars, f.o.b. mills. Cottonseed meal quoted $54 per ton sacked, Memphis; hulls, $5 per ton bulk and $10 sacked.

Linseed—While trading was light, the market remained steady, despite lower flaxseed. Raw oil was maintained at 16c. per pound, tankcars, Minneapolis, May-August delivery. Consumers continued to take sizable lots against former contracts.

Flaxseed—Bids reduced 5c. bushel, but with offers scarce market tone remained steady.

Minneapolis.—Crushers reduced bids on cash flaxseed 5c. a bushel to $3.90, spot and to-arrive, basis Minneapolis. Offerings were extremely limited prior to the decline and there was no trading at the lower level. Market continued tense and sensitive, any increase in demand sending price ideas upward. Remaining supplies were near exhaustion, any future offerings probably to come from farmers who have more seed flax on hand than they need. Flax seeding in the Northwest was progressing rather slowly, warmer weather needed to speed up operations. Generous rains fell over most of flax producing area, delaying planting somewhat, but on the other hand making surface soil conditions ideal. One or two round lots of new-crop flaxseed were booked to-arrive at $3.50 to $3.55 a bushel, basis Minneapolis. Only 2 cars traded in the spot market, both at $3.55.

Receipts and shipments of flax seed, in bushels, were as follows:

	Receipts 1955-56	Shipments 1955-56	Shipments 1954-55
Past week	224,000	208,250	52,500
Since Sept. 1	23,351,500	5,449,500	4,744,500

Oiticica—Buying interest more active, with trading. Tankcars ranged at 15c. per pound, tankcars New York, depending upon seller. Drums were held at 17c. to 17½c., spot as to quantity.

Olive—Demand slackened for spot delivery, but moderate stocks were maintained at $3.60 to $3.70 per gallon, drums, duty paid. Reduced buying interest was reported due in part to offers of olive oil from the Argentine. Prompt shipment offers from the Argentine were reported on the basis of $90 per ton, c.i.f. New York. Reports from Athens stated the Greek Minister of Industry and Trade has announced that no oil will be available for export this year.

Peanut—Business was slow. Crude was unsettled but closed firmer. Tankcars were bid at 16c. per pound, f.o.b., mills.

Rapeseed—This market was firmer due to scarcity of stocks and advanced to 18¾c. per pound, tankcars, New York, prompt delivery.

Soybean Oil Futures

Sales and prices of crude soybean oil futures in tankcars (60,000 pounds) on the New York Produce Exchange for the week ended Friday, May 18, follow:—

	Sales	Cents per pound—High	Low	Close
May	9	15.74	15.35	15.30@15.40
July	17	15.80	15.20	15.36S
Sept.	23	15.00	14.40	14.53S
Oct.	9	13.51	13.20	13.23@13.32
Dec.	12	13.33	12.94	13.00S

Total sales, 70 contracts.

Tung — Improved buying interest stiffened this market and trading was reported up to 24¼c. per pound, tankcars, New York, prompt delivery. Drums were high-

Oils, Fats and Waxes

er, ranging from 25¾c. to 26¼c. per pound, spot as to quantity.

Miscellaneous

Castor Beans—Offers for shipment were reported scarce and with the lack of trading the market was nominal around $160 per ton, f.o.b. Brazilian ports.

Imports of castor beans and castor oil at New York and Philadelphia last week were as follows:—

	Pounds	
	Beans	Oil
Last week	761.850	993.000
Previous week		1.830.000
Corresponding week, 1954	4.662.300	2.534.000
Total this year	18.659.050	28.483.000
Corresponding period, 1954	48.093.665	33.994.000

Cocoa Butter—This market was lower and ranged from 46c. to 51c. per pound, spot as to quantity.

Copra—Market was inactive. Prompt shipment was quoted at $170 per ton, c.i.f. Pacific coast.

Soybean—Crude declined fractionally. Trading was spotty and took place down to 15⅜c. per pound, tankcars, Decatur, May-August shipment. Refined salad was lower at 18.47c. per pound, tankcars, New York, prompt delivery.

Fats and Greases

Greases — Market remained steady, despite spotty trading. Light offerings restricted business as sellers were holding for higher prices. Yellow grease was sold on the basis of 7⅛c. to 7¼c. per pound, tankcars, delivered. Choice white not all hog was held at 8¼c. and trading in all hog was reported at 8½c. to 8¾c., same basis.

Lard—This market was irregular and closed slightly lower at 13c. per pound, drums, Chicago.

Oleo Oil—Trading was light and spotty. Extra was nominal at 17c. to 17½c. per pound, drums, as to quantity and oleo stearine, 12½c. to 13c., barrels.

Tallow—Firm tone prevailed as sellers limited offers and asked higher prices. Trading was spotty, inquiry was fairly active for domestic needs. Export demand was reported slow. Bleachable fancy was quoted at 7½c. to 7⅝c. per pound, tankcars, delivered; extra, 7⅜c. to 7½c.; special, 7⅜c. and No. 1, 7⅛c., same basis. Edible tallow was sold at 12c., same basis. Guaranteed fancy ranged from 9c. to 9⅛c., drums, f.a.s. as to shipment.

Fish Oils

Refined Fish—Strength of crude menhaden was reflected in refined grades and quotations were lifted ½c. per pound. Light pressed was held at 12c. per pound, tankcars, New York basis. Crude menhaden was quiet but maintained at 9c. to 9¼c. per pound, tankcars, works, Atlantic and Gulf coasts.

Fatty Acids

This market remained firm for all grades. Consumers continued to limit new business to actual needs, while withdrawals against recent contracts moved in steady volume. All grades reflecting the steadiness of basic oils and fats.

Cake and Meal

Cottonseed Meal — Market tone was steady, with buying interest confined to nearby shipment. Supplies were ample to meet current demand. Forty-one percent old process was offered at $53 per ton, Memphis; $52, lower Mississippi Valley; $55, Alabama; $59, Georgia; $60, Carolina mills and solvent $51.50 per ton, Memphis and $50.50, lower Mississippi Valley points, May shipment.

Linseed Meal—Improved export interest created a firmer tone. Prices advanced 50c. to $1 per ton.

Minneapolis. — Meal market strengthened moderately, influenced by rather limited supplies and renewal of export interest. Domestic users held purchases to small amounts for replacement needs, showing little interest in forward commitments. Prices were firmer, crushers quoting extracted linseed meal at $53.50 to $54 a ton for May forward, bulk, in carlots, f.o.b., Minneapolis. A moderate amount of re-sale business was done at levels about $1 lower than crusher quotations. Old process expeller type continued in tight supply, prices $1 higher. Quotations were at $60.50, bulk, Minneapolis.

Shipments of linseed meal, in pounds, were as follows:

	1955-56	1954-55
Past week	12.600.000	11.880.000
Since Sept. 1	589.150.000	505.020.000

Soybean Meal—Demand continued spotty. Market was firm and higher. Some mills have curtailed production in the midwest but was heavy in the southeast. Forty-four percent unrestricted was quoted at $61 per ton, May and $62 June-September, Decatur basis and $58.50, May and June-September, f.o.b. Mississippi Valley points.

Waxes

Trend of carnauba wax market continued upwards last week under active consuming demand and high cost of replacements. All grades scored net gains of 7c. per pound. Offers were limited and in firm hands. Yellows were very scarce, while other grades were in moderate supply. Chalky was lifted to 75c. per pound, nominal on spot and No. 2 North country, nominal at 80c. No. 3 Ceara crude advanced to 76c. and Parnahyba 77c. No. 1 yellow, Ceara was offered sparingly and boosted to $1.31 to $1.33 per pound and Parnahyba, $1.33 to $1.35, as to seller and quantity.

Candeilla wax also was higher with sales of crude reported at 57c. per pound and refined, at 60c. for ton lots, with smaller lots 2c. and 3c. per pound higher. Refined ouricury was firm at 80c. to 82c. per pound, spot as to seller.

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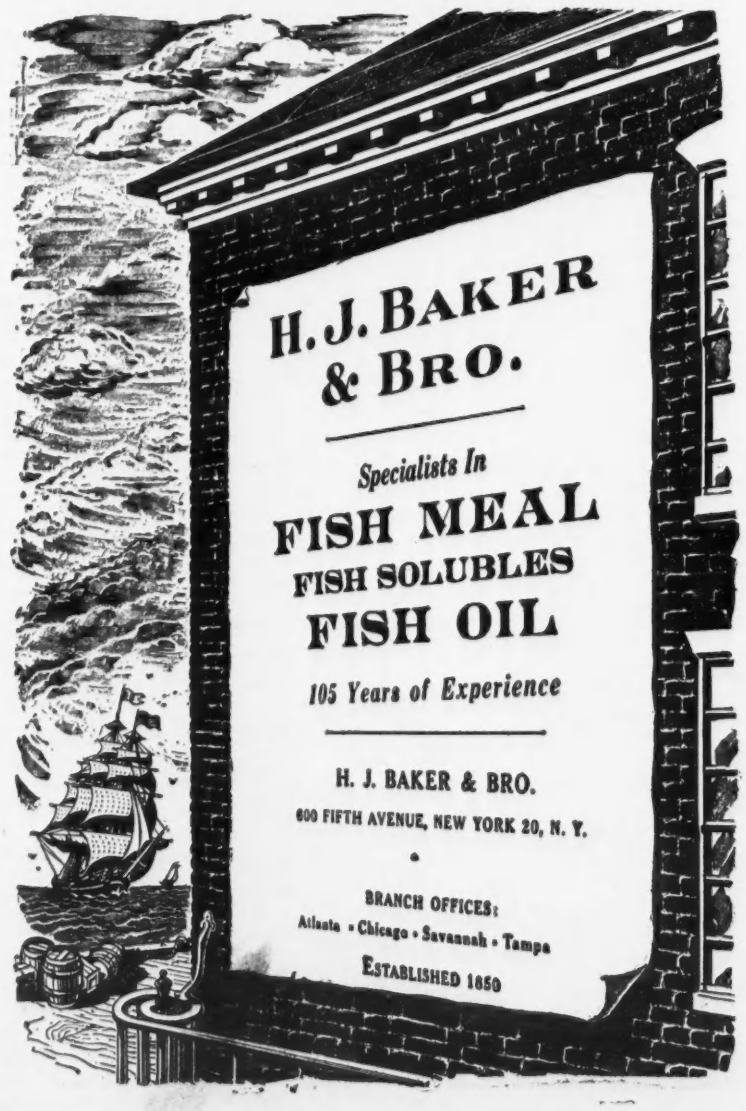

Jobs & People

Bayer Company Division of Sterling Drug, Inc., New York—**Harvey M. Manss,** in charge of the division for almost twenty years, has retired as a vice-president of Sterling, having reached the mandatory retirement age of seventy.

Colton Chemical Company, a division of Air Reduction Company, Cleveland, Ohio — Chicago district manager **James K. Ames** has had his territory widened to include Minneapolis and St. Paul, Minn., Kansas City and St. Louis, Mo., and Wichita, Kan. **David M. Stettler** has been named to assist Mr. Ames in sales and technical service.

Columbian Carbon Company, New York—**Joseph E. Dierkes** has joined the colloidal dispersions unit and is now in charge of control and production at the company's new Tacony (Philadelphia) plant.

Electro Metallurgical Company, a division of Union Carbide & Carbon Corporation, Niagara Falls, N. Y.—**Dr. F. H. Buttner** has been named group manager for market research of the product and process development department.

Hooker Electrochemical Company, Niagara Falls, N. Y.—**Dr. Alan A. Weinberg** and **Bruce N. Wilson,** research chemists, have joined the staff of the plastics laboratory, while **Mahendara N. Bhatt** and **Jawdat N. Khuri,** chemical engineers, have joined Hooker's process study group.

International Minerals & Chemical Corporation, Chicago—**Rune E. Swanson,** assistant controller of U. S. Gypsum Company, has been chosen controller of International Minerals.

Mobay Chemical Company, St. Louis, Mo.—**William A. Holub, jr.,** has become personnel superivisor for Mobay's administrative offices. **J. William McCrackin,** a general manufacturing superintendent at Monsanto Chemical Company's John F. Queeny plant, has been taken on by Mobay as a technical service representative. **Clois R. Morton,** formerly with Monsanto's Lion Oil Company Division in El Dorado, Ark., has been named production supervisor of the phosgenation department at Mobay's New Martinsville, W. Va., facility.

New Jersey Zinc Company, New York—**R. L. McCann,** New Jersey Zinc president, has received the sixteenth annual L-in-Life award presented by the Lehigh University Club of New York.

Nopco Chemical Company, Harrison, N. J.—**D. E. Murphy** has been added to the technical sales staff of Nopco's Pacific Division, with headquarters in Los Angeles.

Oronite Chemical Company, San Francisco—**T. G. Hughes,** Oronite president, this month completed his thirtieth year of service with Standard Oil Company of California. Oronite is a chemical subsidiary of California Standard.

Phillips Chemical Company, Bartlesville, Okla.—**D. W. Thornburg** has been promoted to plastics sales engineer in the New York district office to be established this summer by the plastic sales division of Phillips Chemical.

Westvaco Mineral Products Division, Food Machinery & Chemical Corporation, New York—**Thomas M. Craig** has become assistant product manager for phosphates with headquarters in New York. **James A. Wedin** has been named sales representative for Nebraska, Iowa and Missouri, with headquarters in the division's Lawrence, Kan., plant. **Ralph A. Skaar** has been made sales representative of the Manhattan and Westchester territories in the New York district.

Fertilizer in Farm Economy Detailed

—Continued from page 3

tilizers. A pound of nitrogen in the form of anhydrous ammonia, for example, costs less today than nitrogen in the form of nitrate of soda did in 1935-39.

The price of land, on the other hand, has gone up 150 percent while cost rates in general and prices of farm products have more than doubled since the period 1935-39, the report added. Various other materials that are derived from anhydrous ammonia such as ammonium nitrate, urea, and nitrogen solutions are also relatively cheap sources of nitrogen and in some instances may be cheaper than anhydrous ammonia when differences in cost of application are taken into account.

Use Increasing

The department also noted that farmers are using about three-and-one-half times as many tons of plant nutrients as they used in 1940. Fertilizer shipments in the year ended June 30, 1955, contained 4.7 times as much nitrogen (N), 2.5 times as much available phosphate (P_2O_5), and 4.2 times as much potash (K_2O) as were present in fertilizers shipped in 1939-40.

D. B. Ibach, of the production economics research branch, of the Agricultural Research Service, in a special chapter in the report discussing nitrogen fertilizer in farming today, stated that notwithstanding the large increase in use of plant nutrients, particularly nitrogen, many farmers are using much less than would represent practical optimum rates for their situations.

Even for cotton in the south, he said, estimates of general response indicate that on the average rates are at a level at which an additional dollar spent for fertilizer would yield an additional return of about five dollars.

"This is no doubt well below the practical optimum for more farmers," Mr. Ibach said, "and it provides an indication that current rates on many other crops may also be below optimum levels after allowing for risk, uncertainty and restriction on funds available for fertilizer."

Effects of Nitrogen on Corn

Mr. Ibach illustrated the effect of applying nitrogen on costs per unit of production by using corn as an example. He showed that by increasing nitrogen to recommended levels in combination with other improved practices, farmers could slightly reduce average cost per bushel, substantially increase net returns per acre, and still leave adequate margin for risk, by doubling their current rates of application.

In discussing the effect of fertilizer on rotations, Mr. Ibach said that farmers can reduce unit costs and increase the margin of returns over total cost by increasing rates of application of fertilizer on the principal cash and feed crops.

"This puts them in stronger position to make investments in soil improvements often needed when shifting acreage from "surplus' crops to other uses. Many farmers have used fertilizers, particularly phosphate and potash, to aid in making changes that include utilization of forage grown on land diverted from surplus crops. However, for many farmers, this involves a substantial net cost that presents a major problem in the effort to adjust to changes in supply-demand relationships.

"The first farmers to adopt new improvements that result in higher yields gain most from advancing technology. As adoption becomes more general, if the demand situation remains unchanged, the effect of increased total production is to lower prices, because demand for farm products is relatively inelastic."

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EDTA, Other Indicators

—Continued from page 7

controlled to an actual lot assay greater than 99 percent. Interfering impurities such as heavy metals and iron are held at low levels as is insured by the actual lot analysis provided on the label.

Along with these chelating agents, Baker is now offering the associated indicators "Eriochrome Black T" and "Murexide" (ammonium purpurate) in a powdered form. Further, the following indicators for chelatometric use of recent development are being introduced:—

"PAN" (1-(2-pyridylazo)-2-napthol), Pyrocatechol Violet (pyrocatechol sulfonphthalein), and "Zincon" (2-carboxy-2'-hydroxy-5'-sulfoformazyl benzene). These indicators also have applications as colorimetric reagents. Bal (Dimercaprol, U.S.P.) has also been made available by Baker in small package size for analytical use as a selective masking agent.

AEC Asks Congress

—Continued from page 7

injured by radioactivity of an atomic power plant accident.

AEC Chairman Lewis L. Strauss testified before the committee that the insurance companies are prepared to underwrite up to $65 million in public liability suits from a single accident. This is four times the amount of any public liability policy heretofore, he said, but beyond that insurance firms are unwilling to go.

Without the government underwriting the balance, he added, the lack of protection against possible liability "constitutes a major deterrent to the development of nuclear power by private industry."

Two bills have been introduced in congress for insuring the operators of nuclear power projects, but neither has advanced beyond the introduction stage. One bill proposes that the government protect a reactor operator against all damage suits not covered by private insurance. The other would limit the owners' liability to twice the amount of capital invested in the plant.

In testimony submitted to the committee, it was stated that lethal conditions would prevail within the immediate vicinity of a 100,000-kilowatt plant which got out of control, while in the case of plants in the millions of kilowatts category, these lethal conditions might extend for ten to twenty-five miles.

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1—Patterson NEW 6'x8' Porcelain lined Mill 50 HP motor.
3—Abbe Paterson 6'x8' unlined Ball Mills.
3—Abbe 5'x6', 4'x5', 3'x3½' Silex lined Pebble Mills.
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WASTE DISPOSAL PLANT
Built 1951 — Unused

Oliver 5'3" Dia. x 8' Face Rotary Vacuum Filter, Precoat; with Nash H-6 Vacuum Pump.

34,000 gal. Lead Lined Steel Reaction Tank with Agitator.

Acid Tank, Slurry Tank, Feed Tank, Slurry Pump, Sledge Pump, Acid Pump, Interconnecting Piping, etc.

CENTRIFUGALS

1—AT&M Susp. 48" dia. Perf. Basket, St. St., Fume tight.
1—Fletcher Susp. 40" dia. Imperf. Basket, Steel.
1—Tolhurst Susp. 26" dia. Imperf. Basket, Steel.
2—Bird Solid Bowl, Continuous Filter, 36" x 50" and 40" x 60".
1—Bird 24" x 24" Continuous Screen Filter.
6—DeLaval Nos. 74-11; 94-01; 600, LA-11.
2—Sharples Super Centrifuges, St. St. Bowl.

CRYSTALLIZERS

2—Swenson-Walker, 30' long each, Welded Jackets.
2—B & S 6' dia. Stainless Steel Crystallizing or Evap. Kettles, with jacket and agitator.

DRYERS

1—B & S 3' x 15' Rotary Dryer, Everdur Constr.
1—Stainless Steel Rotary Dryer, 38" dia. x 15' long.
4—Devine #27 Vacuum Shelf Dryers, two-door, 17 shelves, 475 sq. ft.; with condensers.
1—Devine #23 Vacuum Shelf Dryer, two-door, 13 shelves, 356 sq. ft.
2—Devine Vacuum Shelf Dryers, 6 shelves, 39" x 59", 80 sq. ft. 9½" space. UNUSED.
1—Stainless Steel Spray Dryer, 19' dia. x 20' high, still installed in Camden, N. J.
1—Bowen 5' dia. Stainless Steel Spray Dryer.
1—Stokes 3' dia. x 15' long Jacketed Rotary Vacuum Dryer.
4—Double Drum Dryers: 32" x 52"; 24" x 60"; 24" x 36"; 22" x 38".
5—Rotary Hot Air Dryers: 5'6" D x 42' L, 4'6" x 40', 3' x 24'.
2—Hardinge Rotary Coolers, 104" x 70', 104" x 30'.
1—Hardinge XC-2 Ruggles Coles Rotary Steam Tube Dryer, 4' D x 30' L.

EVAPORATORS—STILLS

1—Conkey 1900 sq. ft. Triple Effect, Vertical long Herculoy tubes.
1—Buflovak 588 sq. ft. Double Effect, all stainless steel.
1—Stainless Steel, 145 sq. ft. coil, 500 gal. pot.
1—Stokes 150 gal. St. St. Jacketed Vacuum Still.
3—Stainless Steel Packed Columns: 8" dia. x 26' H; 14" dia. x 25'; 23" x 80".
2—Stainless Steel Cascade Columns 5' dia. x 50' high.

FILTERS

1—Niagara #510-28 Type 316 Stainless Steel Filter, with extra set of screens.
1—Feinc Rotary Vac. Filter 6'6" dia. x 6', string discharge.
1—Alsop SD-6-WR-10 Stainless Steel Jacketed Filter.
3—Sweetland Filters: #12 (72 lvs.); #5 (20 lvs.); #2 (18 lvs.).
2—Elmco 10' x 12' Rotary Filters, Rubber Covered.
9—Filter Presses open and closed delivery, 12" to 36".
1—Niagara #95-36 Filter with stainless steel leaves.
1—Sperry Aluminum Filter Press, 15", 29 ch.

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25 cu. ft. SS Cone Blender.
19 cu. ft. Patterson Blender.
C27 Sharples Super-D-Hydrator SS.
C20 Sharples Super-D-Hydrator SS.
PN14 Sharples Super-D-Canter SS.
36"x50" Bird Cont. Centrifuge.
40" Bird Centrifuge, suspended.
40" SS Bird Sus. Perf. Centrifuge.
48" Bird SS Centrifuge, perforated.
310-12 L. B. Roto Louvre Dryer, SS.
625 CFM Worth. Compressor, 100 PSI.
190 sq. ft. SS Evaporator.
5'x10 Hearth Herreshoff Furnace.
24" Shriver Rubber Covered Filter.
24" Filter Press, aluminum P&F.
Jeffrey Hammermills, 8x15 to 20x24.
140 cu. ft. Paddle Mixer. NEW.
2TH Micro Pulverizer.
ISW Micro Pulverizer.
412G Stokes Microvac. NEW.
4/0 Raymond Pulverizer.
100 gal. Pfaudler Reactor.
200 gal. SS Reactor.
350 gal. Pfaudler Reactor.
750 gal. Pfaudler Reactor.
2000 gal. Reactor, 200 PSI
3000 gal. SS Reactor.
48" SS SWECO 3-Deck Sifter. NEW.
28A Robinson Gyro Sifter, SS.
310-12 L. B. Roto Louvre Dryer.
502-20 L. B. Roto Louvre Dryer.
212A Stokes Vacuum Pump.
1300 gal. Glass-Lined Tank.
2500 gal. glass-lined Storage Tank.

36" MOLECULAR STILL, 304 STAINLESS. NEW 1951—HARDLY USED.

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STEIN EQUIP'T

OFFERS

DRYERS AND KILNS

Devine #12 & #23 Vac. Shelf Dryers.
Stokes 2'x6' Rotary Vac. Dryer.
1—Allbr. Nell 4x9 Atmos Drum Dryers.
1—Buffalo Vac. Drum Dryer, 24"x20"

CENTRIFUGALS AND CENTRIFUGES

4—Tolhurst 40" Suspended Type.
8—Centrifugals, 12", 20", 26", 30", 40" & 48" Steel, Copper, Stainless & Rubber.
6—Sharples No. 5A Stainless & #6.
2—De Laval Multi Clarifiers 300 & 301.

FILTERS

#2 Sweetland Filter 12 Stainless covered leaves
1—Vallez Filter #49 with 41 Stainless covered 44½" dia. leaves.
Gen. Amer. 2'x1' Rotary Vac. Filter.
Sperry and Shriver 6" to 36" Iron & wood. Sweetland & Oliver Filters.

KETTLES AND TANKS

Pfaudler 250 gal. Glass Lined Jack. Kettle.
Dopp 350 gal. Agit. Jack CI Vac Kettle.
2—Impreg. Units 30" & 36" dia. complete.
6—Jack. steel Kettles to 1000 gals.
2300 gal. vert. agit. Jack. Steel Kettle.
1—250 gal. Lead lined Kettle.
Stainless, alum., copper. Glass lined, lead lined and steel kettles and tanks.

PULVERIZERS AND MILLS

2—Mikro Pulverizers #2TH & #2SI.
Abbe 37"x30" chrome-mang. Ball Mill.
Patterson 30"x42", 4'x5' & 6'x8'.
Abbe 30"x30". Also Jar Mills.
#1 Raymond Autom. Pulverizer, 20 HP.
1—#00 Raymond Mill, 30 HP complete.
2—#0000 Raymond Mills.
Sturtevant #0, 18" hinged Hammer Mill.
Schutz-O'Neill #1 & 20" Pulverizers.
Williams #3 & 2XX Hammer Mills.
Ball & Jewell Rotary Cutters Lab & up.
Jeffrey 18"x18" single Roll Crusher.
2—Robinson 18" & 22" BB Attrition Mills.
1—Lehman 4 roll WC., 12"x36" Steel Mill.
4—Lehman & Kent 3 Roll Steel Mills, 9" x32", 12"x30", 16"x40".
1—Monarch 9"x24" Steel Roller Mill, 3 pr. high. Also 7½x20, 4 Roll.
Houchin 18"x30" 4 Roll Granite Stone Mills.
2—U.S. & Premier 1½ H.P. Colloid Mills.

MIXERS, SIFTERS & SCREENS

Day Imperial 75 x 150 gal. Jack. Mixers.
Lancaster 6' dia. Vert. Mixer 25 HP.
Kent 3 HP. continuous dry mixer.
Baker Perkins double arm Mixers, 100 & 50 gals. Also single arm Mixers.
Blystone 3000# horiz. spiral mixer.
Day Brighton 20 gal. Change Can Mixers.
Read 50 & 100 gal. double arm mixers.
Read 80 qt. vert. mixer, 3 speed.
Tyler 3'x5' Vibratory 2 deck Screen.
10—Dry Powder Mixers, 50 to 3,000#.
3—Day 8, 15 & 40 gal. Pony Mixers.
15—Portable Elec. Mixers, ¼ to 3 HP.
6—Lead and Paste Mixers to 150 gals.

MISC. AND SPECIALS

Stokes 280A 4" dia. Preform Machine.
Kux 2½" dia. Tablet Machine.
Tablet Machines, Single Punch & Rotary.
Anderson & French Oil Expellers.
3—Stokes and Day Powder Fillers.
Filling Machines & Labelers.
Pneumatic Scale Automatic Capper.
1—Howe Mogul barrel and bag packer.
2—Worth 12"x12"x12" Vac. Pumps.
8—Devine, Buffalo, Stokes Vac. Pumps.
Conveyors & Elevators. Gas Boilers.
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Centrif., Rotary, Duplex & Triplex Pumps.

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Pfaudler Glass Lined Reactors; Closed, Jacketed; 500 & 1,000 Gal.

Blaw Knox Stainless Reactor; Jktd. Agtd. 7'6"x7'6".

Monel Reactor 785 Gal.; Jktd. Agtd.

A. O. Smith 1,750 Gal. Autoclave in Type 317 S/S; agitated.

Houchin Nickel lined Jacketed Kettle; 6'x5'; double motion agitator.

Dowtherm Resin Kettles 2 Sizes, 8'x10' and 7'6"x10' in Type 47 Stainless contacts.

Nickel Lined Steel Pressure Tanks; Jacketed 50 PSI; internal 125 PSI 7'x11'; with 7½ HP agitator.

Zaremba Double Effect INCONEL Evaporator with Calandria; 430 sq. ft.

American Sterilizers; Jacketed; Double Door from 30"x48"x84" to 48"x42"x96".

Nickel Plated Dryer Drums, 4'x4'. Buflovak Double Drum Drier, 42"x100" complete.

Buflovak Model D Double Drum Dryer; 32" x72" complete.

Carrier Silica Gel Dehumidifier Model RG; 800 CFM.

Devine No. 12 Vacuum Chamber Dryer; shelves 42"x42" with Condenser and Receiver.

Hersey Rotary Counter Current Gas Fired Dryer; 5'x26', designed for a 1000°F.

Combustion Engineering (Raymond) 2 Stage Flash Drying System with Imp Mill, Cyclone Collector, etc.

Sharples H2 Nozlector at 6000 RPM; 6 nozzles; 2 Liquid Discharge; 1 Solids Discharge; 15 HP XPL Motor 3/60/220 with Starter, condition like NEW; original cost over $20,000. FMC PRICE $8,500.

Sharples C27 D-Hydrator Type BM-123 C-65V with Type 316 Stainless Steel Contacts; 30 HP XPL Motor with automatic controls.

Bird 48" Rubber Covered Suspended Type Centrifuge with Plow and Fume Housing. Tolhurst Suspended Rubber Covered Centrifuge; Imperforate Basket.

Bird Continuous Centrifuge 18" x 28"; with Solid Conical Bowl.

Baker Perkins continuous CASCADE MIXER with Type 316 Stainless Steel Contacts; fully jacketed for 250 PSI, sigma arms.

NEW Porter Stainless Steel Jacketed Double Ribbon Mixer; 122 cu. ft.; Dimensions 4'x4'6"x7'6"; 25 HP Motor.

A. O. Smith Stainless Lined Pressure Tanks, 20,000 gal. 10'x30"; 135 PSI Pressure.

Mojonnier Stainless Steel Vacuum Pan; 3'x10' with Stainless Calandria and Downcomer.

Vulcan Stainless Column; 14"x26'8" high; 10 Sections with S/S Decanter 20"x44".

Lummus Alcohol Recovery Unit in Copper 5 Sections; 18"x21' high.

Whitlock S.S. Heat Exchanger; 250 sq ft., 17"x128" shell.

Vertical Stainless Steel Condenser; 130" high; 220 square feet of surface.

Stainless Steel Tubular Condenser; 14"x10', 115 square feet of surface.

Karbate Tube Bundles; 68 Tubes per bundle, 22" diameter x 6' long.

Stainless Calandria Type Heat Exchanger; 300 ¾" Tubes; 185 square feet.

Porcelain and Buhrstone Lined Pebble Mills by Abbe, Patterson, International and others;

20"x30"	36"x42"
48"x60"	60"x72"
60"x96"	96"x96"

Hardinge Conical Ball Mill with Titanite Liners; 10'x48".

4 Gates Tube Mills; 5'x22'.

Williams Swing Hammer Mills, all sizes up to 200 HP.

Raymond No. 50 Stainless Imp Mill with 50 HP motor & accessories.

Raymond No. 32 Imp Mills; 20 HP.

Ross and Kent 3 Roll Mills; 12"x30" and 16"x40".

Mikro Pulverizers from Bantam to No. 4; all types.

Shriver 12", 18" Aluminum Filter Presses.

Shriver & Sperry 24" Stainless Filter Presses.

Shriver STEAMHEATED 36" Cast Iron Filter Press.

Shriver 42" Cast Iron Plate & Frame Filter Presses.

Sweetland Pressure Type Leaf Filters from No. 2 to 12.

Enzinger Leaf Type Pressure Filter 75 PSI; 15 Leaves; 360 sq. ft.

Stainless Nutsche Type Filter; 25"x25" and 32"x18".

Bird Young Rotary Vacuum Filter; 4'x4'; S/S screens.

Stainless Hor. Rotary Vacuum Filter 7' diameter.

Oliver Dorrco Rotary Vacuum Filter; 6'x3'; nickel contacts.

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EQUIPMENT
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1—Bowen Type 316 Stainless Steel Laboratory Spray Dryer.

1—Stokes Model 138 Vacuum Shelf Dryer, with 8 shelves.
1—Link Belt Roto Louvre Dryer, Model 502-20.
1—Bartlett & Snow Rotary Dryer, 4'6" x 36'6".
2—Rotary Dryers, 4'6" x 40'.
1—Stokes Rotary Vacuum Dryer, 3' x 12'.
1—Devine Rotary Vacuum Dryer, 5' x 20'.
1—Buflovak Double Drum Dryer, 42" x 120", ASME.
1—Buflovak Double Drum Dryer, 24" x 36".
1—Mikro #2TH Pulverizer with 15 HP motor.
2—Mikro #1SH Pulverizer.
1—Mikro #1SI Pulverizer, with motors, complete.
2—Bantam Mikro Pulverizers.
1—Read Double Arm Sigma Blade Jacketed Mixer, 50 gal.

2—Baker Perkins Laboratory Double Arm Sigma Blade Mixers, 0.7 gal. each.
10—Baker Perkins Double Arm Sigma Blade Jacketed Mixers, 100 gal.

1—Mikro #4TH Pulverizer with 60 HP TEFC motor.

1—Baker Perkins Double Arm Jacketed Mixer, 300 gal.
1—J. H. Day Stainless Steel Double Arm Jacketed Sigma Blade Mixer, 200 gal.
1—J. H. Day Gearless Pony Mixer, 50 gal., complete.
1—International 19 cu. ft. Stainless Steel Conical Blender.
1—Stainless Steel Jacketed Kettle, 2500 gal.
2—Stainless Steel Jacketed Kettles, 1200 gal. ea.
1—Stainless Steel Storage Tank, 3000 gal.
6—Patterson Steel Jacketed Kettles, 2500 gallons each.

3—Stainless Steel Jacketed Kettles, 125 gallons each.
10—Aluminum Horizontal Storage Tanks 9' x 36', 17,000 gallons each.
1—Acme Type 316 Stainless Steel Jacketed Reactor, 2,000 gallons.
1—Pfaudler Glass-lined Jacketed Reactor, 200 gallons with Anchor Type Agitator.
1—Pfaudler Glass-lined Jacketed 10 gallon Reactor, with Anchor type Agitator.

1—Sweco 48" Separator (New).

2—Sperry C.I. Plate and Frame, closed delivery Filter Presses, 24" x 24" with 45 chambers each.
1—Sperry 2-eyed Closed Delivery Filter Press, 24" x 24", 20 chambers.
2—Bird Continous Centrifugal Steel Filters, 24" x 38", complete with 30 HP motors.

10—Sweetland #12 Filters with 72 Stainless Steel Leaves.
1—Bird Continuous Centrifugal Filter, 40" x 60" (New).
2—Ross Aluminum Heat Exchangers, 77.5 sq. ft. and 155 sq. ft.
6—Badger Aluminum Condensers, 5, 106, 122 sq. ft.
2—Alco Admiralty Metal Heat Exchangers, 1600 sq. ft. ea. (New).
1—Vogt Admiralty Metal Heat Exchanger, 450 sq. ft. (New).
12—Struthers Wells Stainless Steel Heat Exchangers, 650 sq. ft. ea.
2—Ross Steel Heat Exchangers, 852 and 936 sq. ft.

2—Bird Type 347 Stainless Steel Centrifuges, 42" perforated baskets, complete with plows and motors.

4—2 Roll Laboratory Mills, 6" x 13" (New).

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2—Stainless Steel Hersey Rotary Dryers, 5'x26' and 6'x23'.
2—8'x125' Rotary Kilns.
1—Williams 52" H.S. Roller Mill.
1—Day #30 Imperial jack. Mixer, 75 gal.
9—Sperry 18"x18" Filter Presses, 11 ch.

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Stokes 30"x8' SS Rotary Vac. Dryer 5 hp. exp.
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Gen. American 42"x120" Twin Drum Dryer
Mikro #4 Pulverizer with 40 hp motor
AT&M 60" Centrifugal 316 SS with 10 hp mtr
1200 Gal. 347 SS Agtd Kettle 5 hp exp. mtr.
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HAMMER MILLS—#1 Mikro Jeffrey Junior 15x8 (10 Hp), 20x20 (30 HP), Gruendler Model 2 W feed screws, 24" Mikro Sawtooth-Robinson #9.
PUMPS—Centrifugal, Iron, Rubberlined, Stainless.
PEBBLE MILLS — 18x18, 24x24, 24x36, porcelain lined, 4x5, 5'x6', 6x9 Buhrstone, 24x18 Rubber; 12"x24" Rod Mill.
BALL MILLS—Hardinge 6'x22", w New Lining, 7'x48" Pebble—5'x21' tube.
CRUSHERS—JAW — 20x4 Farrel, 11x26 Champion, 14x28 Acme.
CRUSHERS—ROLL—16x10, Sturtevant, 30x16 Chambers.
ROTARY DRYERS—12"x22', 3'x20', 39"x21', 44"x25', 5'x40', 6'x30'.
VACUUM PUMPS—Nash Hytor 623, 1253, H6-H7—IR. 18 & 60 cfm, Leiman 105 cfm.
BLOWERS — Spencer 150 cfm 16-oz.—270 cfm 24-oz.—1300 cfm 16-oz.—6700 cfm 16-oz.
AUTOCLAVE—1 gal. s/s—AGITATED 1000 psi—Jacket 150 psi.
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OUTSTANDING

2—Baker Perkins 200 gal. double arm sigma bladed mixers jacketed.
1—Sharples Stainless Model C20 Super-D-Hydrator w/20 HPXP mtr.
2—Nickel Clad 2500 gal. closed vertical Tanks—125# pressure.
3—Aluminum 3500 gal. vertical closed Tanks.
1—Buflovak Size J double door, 20 shelf vac. shelf Dryer.
1—Buflovak 14 shelf vac. shelf Dryer—42"x42".
2—Devine Size 5—10 shelf vac. shelf Dryer.
1—Fitzpatrick model K comminuter.

1—Louisville 6'x35' stainless & alum tubular Dryer.
2—Sweetland Stainless 690 sq. ft. Filters—hydraulic closing.
1—500 gal. stainless jacket vacuum Still.
2—Day 75 gal. stainless jacketed sigma blade 2 arm Mixer.
2—Patterson & International stainless and steel 25 cu. ft. conical Blenders.
3—Kent 14 x 30"—3 roll high speed roller mills.
1—Ross 9 x 24"—3 roll high speed roller mill.
4—Day 40-8-2½ gallon pony mixers.

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1—Stainless Tank #430 Chrome, vert. 2'x10' deep.
20—Jacketed Kettles—Stainless, Copper, Aluminum.
1—Day Mixer, steam jacketed, 50 gal. Sigma Blade.
1—Copper Evaporator, steam jacketed, 9'1"x3'9".
60—New Pressure Cookers, 18"x18" & 24"x28".
150—Pumps—steam and electric.
1—New Glass Nash Centrifugal Pump, 160 gpm.
1—New Nash Vacuum Pump Type AL-572.
1—Buflovak Jacketed Impregnating Tank 42"x52".
1—Stedman Disintegrator size 40-6.
1—Abbe Ball Mill, 36"x42" Buhrstone lined.
#316 Stainless Steel Tanks, new 100, 200 & 360 gal.
1—Nash Air Compressor, Type AL-623.
1—Manton Gaulin Stainless Homogenizer, 125 gph.
1—I&R Vacuum Pump, 5 H.P., 60'.
4—Heat Exchangers, 12" dia. 11' lg., 43 steel tubes.
1—Stokes Single Punch Tablet Machine.
1—Raymond 8" Hammer Mill, like new.
Davenport Rotary Steam Tube Dryer, 6'x36'.
1—New Louisville Continuous Filtering Machine.
2—Stainless Steel Steam Jacketed Readco Mixers.
1—#316 Stainless Reactor, 265 gals. cap., jacketed.
Abbe Pebble & Tube Mill, 5'x22'—Buhrstone Lined.
1—Patterson Ball Mill, porcelain lined, 17"x27".
1—Patterson Ball Mill, 42x36, jacketed.
6—Steel Tanks 10'6" x 27'—⅜" plate.
2—Large Steam Jacketed Horizontal Mixers.
Robinson Pulverizer #20, with 2 motors 10 HP each.
2—Ribbon Type Mixers, 53 & 90 cu. ft.—like new.
4—Steel Tanks 90,000 gals. ea. vert. welded const.
6—Tanks 49" dia. 68" lg. 550 gal. ea. with M.H.
2—Crystallizers—10' long.
3—3,000 gal. Jacketed Kettles with Turbo Agitators.
1—#10 Day 360 gal. jacketed Sigma Blade Mixer.
4—New Heat Exc. 60" with Cupro Nickel Tubes.
1—Sparkler Stainless Filter Model 33-S-9.
3—2500 gal. Pfaudler G/L Tanks & S/S Agitators.
6—Blackburn-Smith Jacketed Filters, 20 to 160 gpm.
1—Jeffrey Vibrating Conveyor, 15' long.
1—Meade Mill #2 with 7½ H.P. Motor.

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EQUIPMENT OFFERED

For Sale: 2,250 gal. S.S. T304 insulated and agitated Tank; 2,800 gal. S.S. T304 oval shaped Tank; 600 gal. S.S. T304 insulated and agitated Tank; 75 gal. S.S. T304 steam jacketed double sigma blade Day Mixer; three double drum Dryers, 24" x 36", 32" x 90", 32" x 120"; 2—14,000 gal. glass lined Tanks; 150 sq. ft. S.S. T304 heat Exchanger, 18 ft. dia. S.S. T304 spray Dryer. Several S.S. T304 Vacuum Pans. Best Equipment Company, 617 Davis Street, Evanston, Illinois. DAvis 8-0926.

1—Raymond 5 roll high side Mill with double cone separator, complete with motors, collectors, etc. OPD 967.

For Sale: 9-Sperry 18"x18" Filter Presses, 11-chambers; 1 Day #30 Imperial jac. Mixer, 75 gal.; 3 Buflo-vac 42x120, 32x120 atmos. dbl. drum Dryers, complete—1 American 24x36. Wanted—your idle machinery or plants. Consolidated Products Co., Inc., 60 Bloomfield St., Hoboken, N. J. N. Y. Phone—BA 7-0600.

Vacuum Tray Dryer, 100 sq. ft. complete with stainless steel trays, condenser and receiver, and vacuum pump. Can be seen in operating condition. OPD 965.

EQUIPMENT WANTED

4 Inch Or 6 inch Premier Mill; 3 inch Eppenbach Mill; 300 Gal. jacketed stainless steel kettle, closed or open head; 100 Gal. glass-lined kettle. OPD 970.

MATERIALS OFFERED

Surplus Savings: 17,000 lbs. Polyvinyl Alcohol #5042; potential processing possibilities: 10,000 lbs. Isopropyl Benzoate (C&C), low-priced to permit economical conversion to other salable benzoates. Any ideas? also 1 T C per month ethylene dichloride containing other organic chlorides. A good, cheap substitute for pure ethylene dichloride for solvent use. Industrial By-Products & Surplus Co., div. of Aceto Chemical Co., Inc., Flushing 54, N. Y. INdependence 1-4100.

Gum Tragacanth, powdered, USP, Penicks, 2,000 lbs. @$.40 lb. FOB Ogden; Cotton sheet wadding, Stearns & Foster, 32"x6 yds. @$.12 roll FOB Ogden; Milk of Magnesia, NF 5 gr. Tablets 100's Mint Flavored, Chase, 3250 bottles @$.035 FOB Stockton; Calcium Hydroxide USP powder, 4450 vials each makes 1 gallon Lime Water, Fahrney's @$.035 FOB Stockton. OPD 968.

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The sixty-ninth annual convention of the National Paint, Varnish and Lacquer Association will be held November 12 through 14 in Los Angeles. Registration, hospitality and business sessions have been scheduled for the Statler hotel, while social events will be held at the Ambassador and Biltmore hotels.

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Cosmetic Chemists Fete Larrick, Shelley

—Continued from page 7

used as the sole perfume ingredient usually—although not invariably—adversely affected the preparation in the same manner when employed as one component of a blended perfume oil. Independent odor judgments on the effectiveness of raw materials and combinations of such materials, in masking the odor of the thioglycolate and imparting an acceptable perfume note, were made by several perfumers and by chemists specializing in hairwave products, and the results were given.

*Mr. Sagarin and Mr. Balsam are with Standard Aromatics, Inc., New York.

Measurement of Static Charge on Hair

Hyman Henkin, Clarice M. Mills and Virginia C. Ester*

This paper gave a description of several methods which have been employed for estimation of relative electrostatic charge production on hair. Use of an oscillograph-camera set up for estimation and recording of the voltage, or charge, produced by combing hair was described.

Data obtained with this equipment, both on hair swatches and on models' heads, showed a very substantial reduction in static charge following use of creme rinse. Results were given showing length of duration of this reduced static charge effect; also data presented on the effect of relative humidity on electrostatic production following use of shampoo or rinse.

Limitations of the described procedures were mentioned. Comparative results between shampoos as regards effect on static charge generation were found to be largely inconclusive by this method and only a effects among shampoos may be made on the basis of data obtained to date by this procedure.

The authors are with Colgate-Palmolive Company, Jersey City, N. J.

A New Permanent Waving Process

Raymond E. Reed*

A new permanent waving process, involving no chemical oxidation process steps, was described and compared with other methods of waving human hair. Physical, chemical, and practical data were presented for a typical process involving chemical setting of the waved hair and for an atmosphic oxidation procedure. The technical advantages of the latter method were pointed out.

*Mr. Reed is with Toni Company, Chicago.

The Use of Iodophors in Cosmetics

Abraham Cantor, Sylvia Most and Morris Shelanski*

Iodine complexes with iodophors of non-ionic, anionic, and cationic nature have been the subject of intensive investigation. The utility of such iodine complexes in the environmental sanitation field, the pharmaceutical field, and more recently, in the cosmetic or cosmetic drug field, confronts the cosmetic chemist with new problems.

This paper was restricted to iodophor-iodine shampoos. The literature on iodine application to human and animal hair is very limited, and was reviewed herein. Therapeutic and prophylactic applications were also reviewed.

Improved formulations by the use of these "tamed iodine" complexes have been accomplished and have been clinically tested.

The effect of these complexes on the chemistry of the hair and the response of hair so treated to hair setting chemicals, etc., has been investigated. The toxicity of iodophor-iodine shampoos is of prime importance, and was discussed with reference to possible veterinary and human application.

*The authors are with Industrial Toxicological Laboratories, Philadelphia.

The Analysis of Lipsticks

Paul W. Jewell*

This method depends upon the fact that each of the materials which are used in the manufacture of lipstick are relatively soluble in certain solvents and relatively insoluble in certain others. Characteristic solubilities for most of the commonly used lipstick raw materials were given, and a fairly comprehensive separation was founded upon these data.

While this method may be somewhat lacking in analytical precision it should enable the analyst to learn a great deal about the composition of any lipstick. The data thus obtained should enable anyone, skilled in the art, to approach the duplication of the original product with a considerable degree of assurance.

* Mr. Jewell is with Max Factor & Co., Hollywood, Calif.

Laboratory Evaluation of Potential Caries-Preventive Agents in Dentifrices

S. D. Gershon, O. W. Neiditch and D. J. Martin*

The most acceptable criterion of effectiveness of a cleansing or "therapeutic" dentifrice in reducing the incidence of dental caries is a result of a controlled clinical study.

Because of the cost and length of time required to conduct such evaluations, several laboratory tests have been suggested for use in predicting the anti-caries effectiveness of a potential caries-preventive agent.

At this time, the results of such tests are not accepted as valid criteria for determining the ability of therapeutic agents to limit tooth decay. The development of a test which will predict accurately the effectiveness of a caries-preventive agent in a dentifrice should be a major objective of dental investigators.

This paper was concerned with the in vitro laboratory evaluation of potential caries-preventive agents intended for use in a dentifrice. The evaluation procedure utilized was based on the most generally accepted cause of tooth decay, i.e. acid decalcification of the calcified tissues of the teeth.

A protein adsorption test, referred to as the "modified casein test" was developed which permits quantitative screening results providing information on protein substantivity and subsequent acid inhibition ability of potential caries-preventive agents.

* The authors are with Lever Brothers Company in Edgewater, N. J.

Some Practical Problems in the Formulation of Aerosol Hair Sprays

H. R. Shepherd*

The phenomenal growth of the Hair Spray field in the last five years and its adoption by the consumer as a cosmetic staple as far as hair products are concerned has focused a considerable amount of attention on this product by cosmetic chemists.

The various problems usually attendant to the formulation of any cosmetic product were present here, but super-imposed on same were the peculiarities of the aerosol principle.

The proper selection of a combination of seven possible components, i.e., film forming constituents, plasticizers, hair conditioners, huimidity modifiers, emulsifiers for water insoluble films, perfume, and propellent properly formulated and compatible with the container and valve selection were discussed.

Also, there was a discussion of some of the practical problems in manufacturing processes, and a brief discussion of some laboratory screening techniques for evaluation of hair spray films.

* Mr. Shepherd is with Aerosol Techniques, Inc., Bridgeport, Conn.

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Battery Additive

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opinion stated last November by hearing examiner William Pack that the greater weight of evidence did not sustain the charges in the complaint. The greater weight of scientific evidence was on the side of the complaint, it was stated, but the overwhelming weight of consumer testimony was in favor of the additive.

The case first reached the headlines when Mr. Ritchie protested a conclusion by the National Bureau of Standards that his product had no significant beneficial effect on lead-acid batteries. The senate small business committee took up Mr. Ritchie's cause and had scientific tests made which disputed the standards bureau's conclusions.

The resulting blowup led to the firing of Dr. Allen V. Astin, director of the bureau, and his later reinstatement when scientists protested. Later, assistant Secretary of Commerce Craig C. Sheaffer, who had played a key role in the Astin ouster, resigned.

Vinyl Chloride

—Continued from page 5

floor coverings and a host of other products.

In announcing its entrance into the vinyl chloride monomer field, the company said it will be able to draw upon its long experience in the production of chlorinated hydrocarbons, some of which are used as chemical intermediates for "Ethyl" antiknock compound, the company's principal product.

Ethyl's production, the company said, will represent a substantial addition to present vinyl chloride monomer capacity. The initial output of the plant will be sold under long-term contracts.

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Q. What is cancer?
A. An uncontrolled growth of cells. If permitted to spread through the body, it inevitably leads to death.

Q. Can cancer be cured?
A. Many types can be cured, but only if they are discovered and treated early.

Q. How can cancer be discovered in time?
A. By your doctor who has available many diagnostic tests.

Q. What is the American Cancer Society?
A. The only national voluntary agency which fights cancer by research, education and service to cancer's victims.

Q. What has it accomplished?
A. It helped save an American from dying of cancer on an average of every seven minutes last year.

Q. Does that mean it has solved the cancer problem?
A. Unfortunately, no. Despite the advances made, more than 235,000 Americans will die of cancer this year.

Q. Can I help to prevent this tragedy?
A. Yes. By having regular health examinations yourself. And by contributing to The American Cancer Society.

Q. What will my contribution be used for?
A. For research that may some day save your life, for education and for helping cancer's victims.

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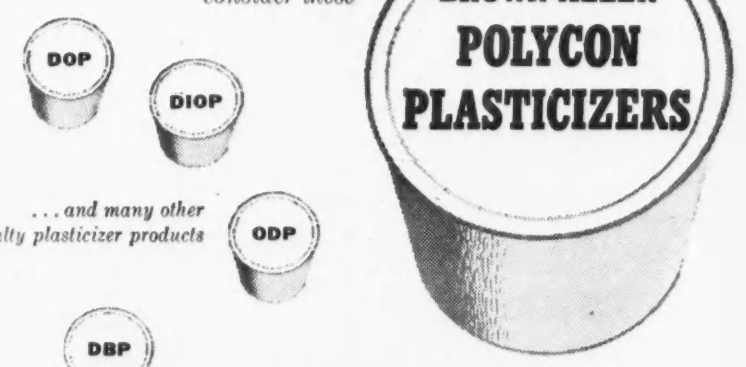

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